TOTE BOOK

1985

National Cancer Program

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

National Institutes of Health

NCI EACT BOOK

National Cancer Program 1985

FOR ADMINISTRATIVE USE

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service National Institutes of Health

PREFACE

The information set forth in this publication is compiled and amended annually by the Financial Management Staff of the National Cancer Institute and is intended primarily for use by members of the Institute staff, the principal advisory groups to the Institute and others involved in the administration and management of the National Cancer Program. Questions regarding any of the information contained herein may be directed to the Financial Manager, National Cancer Institute, 9000 Rockville Pike, Bethesda, Maryland 20892.

TABLE OF CONTENTS

D (PAGE
Preface	ii
GENERAL INFORMATION	
Directory of Personnel	iv
Year 2000 Goals and Objectives	٧i
Significant Initiatives in 1985	1
Director's Biography	3
National Cancer Advisory Board	4
Division Boards of Scientific Counselors	5
National Cancer Institute Executive Committee Members	6
Organizational Charts: National Cancer Institute	7
Office of the Director	8
Division of Cancer Treatment	9
Division of Cancer Biology and Diagnosis	11
Division of Cancer Etiology	12
Division of Cancer Prevention and Control	13 14
5-Vear Relative Survival Rates	15
5-Year Relative Survival Rates. Number of Deaths for the Five Leading Cancer Sites – 1982.	16
Relationship of Cancer to Leading Causes of Death by Age, Group and Sex	10
in the United States – 1982	16
Estimated New Cancer Cases and Deaths by Sex for all Sites – 1985	17
NCI Intramural Review Process	18
Research Positions at the National Cancer Institute	19
Special Training Mechanisms: Fiscal Year 1985	22
Building Location and Square Footage	24
BUDGET DATA	
Major Steps in the Budget Formulation Review Process	25
Major Steps in the Budget Formulation Review Process	
Fiscal Year 1985	26
NCI Budget - Fiscal Year 1985	27
NCI Program Structure – Fiscal Year 1985	28
NCI Research Programs – Fiscal Year 1985	29 30
NCI Extramural Funds – Fiscal Year 1985	31
Total NCI Dollars by Mechanisms – Fiscal Year 1985	32
Reimbursement to NIH Management Fund – Fiscal Year 1985.	33
-	-
GRANTS AND CONTRACTS	
NCI Grant Process	34
NCI Request for Application (RFA): The Process	35
NCI Contracts Award Process	36
Distribution of Grants and Contracts – Fiscal Year 1985	37 38
National Cancer Network	39
National Cancer Network	40
Distribution of NCI Contracts – Fiscal Year 1985	42
Distribution of the Grant Dollar – Fiscal Year 1985	43
Foreign Research Grants and Contracts – Fiscal Year 1985	44
Minority-Focused Programs	45
HISTORY TABLES	
	46
Appropriations of the NCI Fiscal Years 1938-1986	46 47
Comparison of Dollars, Positions and Space	48
Comparison of Dollars, Positions and Space	49
NCI Total Research Projects – Fiscal Years 1980-1985	50

DIRECTORY OF PERSONNEL

		DIRECT-IN
DIRECTOR Dr. Vincent T. DeVita, Jr.*	BUILDING 31 11-A-48	496-5615
DIRECTOR, STAFF OPERATIONS Ms. Iris Schneider	BUILDING 31	496-5534
MS. IT'S SCRIPCIDER	RUIII DING 31	496-6266
DEDUTY DIRECTOR	BUILDING 31	
Dr. Peter Fischinger*		496-1927
ASSOCIATE DIRECTOR FOR PROGRAM PLANNING AND ANALYSIS	BUILDING 31	496-1148
Mr. Louis M. Carrese	10-A-52	496-6448
Ms. Betty Ann Sullivan	10-A-48	496-1038
CHIEF, SYSTEMS PLANNING BRANCH Ms. Barbara Murray		496-551
LEGISLATIVE ANALYST/CONGRESSIONAL LIAISON Dr. Mary Knipmeyer	BUILDING 31 10-A-32	496-521
ASSOCIATE DIRECTOR FOR CANCER COMMUNICATIONS Mr. J. Paul Van Nevel	BUILDING 31 10-A-29	496-663
CHIEF, INFORMATION RESOURCES BRANCH Mr. Joseph Bangiolo	BUILDING 31 10-A-18	496-6750
CHIEF, REPORTS AND INQUIRIES BRANCH Dr. Robert M. Hadsell	BUILDING 31 10-A-29	496-663
CHIEF, INFORMATION PROJECTS BRANCH Ms. Rose Mary Romano	BUILDING 31 4-B-41	496-6793
ASSOCIATE DIRECTOR FOR INTERNATIONAL AFFAIRS Dr. Ihor J. Masnyk, Acting	RUILDING 31	496-476
DIRECTOR, INTERNATIONAL CANCER INFORMATION CENTER Ms. Susan P. Hubbard	BUILDING 82	496-909
ASSOCIATE DIRECTOR FOR ADMINISTRATIVE MANAGEMENT Mr. Philip Amoruso*		496-573
Mr. Stephen Ficca, Deputy	RITH DING 31	
CHIEF, ADMINISTRATIVE SERVICES BRANCH Mr. James Prather	BUILDING 31	
CHIEF, FINANCIAL MANAGEMENT BRANCH Mr. John P. Hartinger		
CHIEF DEPONNEL MANAGEMENT RRANCH	RUILDING 31	496-333
Ms. Marianne Wagner		496-333
CHIEF, RESEARCH CONTRACTS BRANCH Mr. John Campbell CHIEF, MANAGEMENT ANALYSIS BRANCH Mr. Thomas L. Kearns		
Mr. Leo F. Buscher, Jr	8-A-18	
CHIEF, EXTRAMURAL FINANCIAL DATA BRANCH Mr. Robert E. Spallone	8-A-03	496-766
* NCI Executive Committee Members		

		DIRECT-IN DIALING
FREDERICK CANCER RESEARCH FACILITY GENERAL MANAGER/PROJECT OFFICER	FREDERICK, MARYLAND BUILDING	
Dr. Berge Hampar		FTS-8-935-1108
DEPUTY GENERAL MANAGER Mr. Richard Carter	BUILDING 427	FTS-8-935-1106
DIRECTOR, DIVISION OF CANCER ETIOLOGY	BUILDING 31	
Dr. Richard Adamson*		496-6618
ADMINISTRATIVE OFFICER Mr. Mark Kochevar	BUILDING 31 11-A-11	496-6556
DIRECTOR, DIVISION OF CANCER BIOLOGY AND DIAGNOSIS Dr. Alan S. Rabson*	BUILDING 31	496.4345
ANNUARIA PROPERTY OF THE PROPE	BUILDING 31	
Mr. Larry D. Willhite	3-A-05	496-3381
DIRECTOR, DIVISION OF CANCER TREATMENT Dr. Bruce Chabner*	BUILDING 31 3-A-52	496-4291
ADMINISTRATIVE OFFICER Mr. Donald Christoferson	BUILDING 31 3-A-50	496-2775
DIRECTOR, DIVISION OF EXTRAMURAL ACTIVITIES	BUILDING 31	400 544
Mrs. Barbara Bynum*	BUILDING 31	490-014/
ADMINISTRATIVE OFFICER Mr. Lawrence J. Ray	10-A-10	496-5915
DIRECTOR, DIVISION OF CANCER PREVENTION AND CONTROL Dr. Peter Greenwald*	BUILDING 31 4-A-32	496-6616
ADMINISTRATIVE OFFICER Mr. Nicholas Olimpio	BUILDING 31	
*NCI Executive Committee Members		

YEAR 2000 GOALS AND OBJECTIVES

The National Cancer Institute established a goal of reducing cancer mortality by 50 percent by the year 2000. This optimistic endeavor is made quite achievable both because of the promise of today's scientific opportunities and the record of accomplishments of the past decade. This effort is primarily based on aggressive application of existing knowledge about cancer prevention, screening, early detection, and treatment, and on the application of future gains in knowledge in treatment and prevention regimens that can reasonably be expected over the next decade and a half.

In order to fulfill the goal of 50 percent mortality reduction by the year 2000, four main areas will continue to be pursued and emphasized—smoking prevention and cessation, dietary modification, early detection of cancer through effective screening, and widespread application of the latest achievements in basic research which allow new and effective treatment regimens.

The following depicts NCI areas to be emphasized and objectives necessary to achieve its year 2000 goal:

CONTROL AREA	BRIEF RATIONALE	YEAR 2000 OBJECTIVE
Prevention/ Smoking	The causal relationship between smoking and cancer has been scientifically established	Reduce the percentage of adults who smoke from 34 percent (in 1983) to 15 percent or less.
		Reduce the percentage of youths who smoke by age 20 from 36 percent (in 1983) to 15 percent or less.
Prevention/ Diet	Research indicates that high-fat and low- fiber consumption may increase the risk for various cancers. In 1983 NAS reviewed research on diet and cancer and	Reduce average consump- tion of fat from 40 percent to 30 percent or less of total calories
	recommended a reduction in fat; more recent studies led NCI to recommend an increase in fiber. Research is underway to verify the causal relationship and to test the impact on cancer incidence.	Increase average consumption of fiber from 8 to 12 grams per day to 20 to 30 grams per day.
Screening/ Breast	The effectiveness of breast screening in reducing mortality has been scientifically established.	Increase the percentage of women ages 50 to 70 who have annual physical breast exam and mammography from 45 percent for physical exam alone and 15 percent for mammography to 80 percent for each.
Screening/ Cervical	The effectiveness of cervical screening in reducing mortality has been scientifically established.	Increase the percentage of women who have a Pap smear every 3 years to 90 percent from 79 percent (ages 20 to 39) and to 80 percent from 57 percent (ages 40 to 70).
Treatment/ Transfer of Research Results to Practice	NCI review of clinical trial and SEER data indicates that, for certain cancer sites, mortality in SEER is greater than mortality experienced in clinical trials.	Increase adoption of state-of the-art treatment, including improved treatment of micrometastases.

SIGNIFICANT INITIATIVES IN 1985

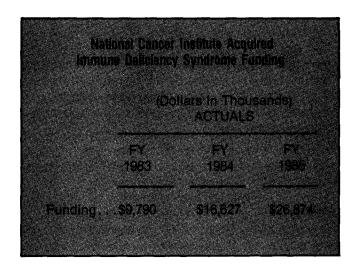
Progress in Acquired Immune Deficiency Syndrome (AIDS)

Current NCI activities in AIDS research have yielded promising results in clarifying the genesis of this immunological disease, as well as in approaching suitable, effective methods of control and treatment.

The possibility of new cases of transmission of HTLV-III, the virus found to be the cause of AIDS, through infected blood or blood products has been virtually eliminated. A simple blood screening test has been developed which can detect the presence of antibodies to HTLV-III, an indication that the donor has been exposed to the virus.

In the area of treatment, agents are currently being tested which have shown anti-HTLV activity, along with others which exhibit this anti-reverse transcriptase activity while being relatively free from dangerous side-effects. Currently, agents are being sought and tested for the possibility of restoring severly damaged or lost immune function.

NCI is currently working in conjunction with the National Institute of Allergy and Infectious Diseases (NIAID) to cooperatively attack the problem of AIDS. Efforts include acquisition and screening of new antiviral drugs, selection of new drugs for clinical trials, preclinical toxicology, formulation, and pharmacology of these promising agents, preparation of Investigational New Drug Applications for any promising anti-AIDS agents, joint clinical trials, and expansion of efforts to develop and test a safe and effective vaccine.



Cancer Prevention Awareness Program

Today we know that nearly 80 percent of cancers are related to environmental causes, many associated with personal behavior such as cigarette smoking and eating habits. However, a survey conducted by the NCI in June 1983 revealed that the public's view of cancer is confused; people are pessimistic about cancer risks and the potential for personal control over those risks.

In March 1984, NCI introduced the Cancer Prevention Awareness Program—a major NCI effort to increase public awareness of the possibilities for cancer prevention, presenting a challenge to the American people to learn what they can do every day to control their own risks.

The program theme, "Cancer Prevention: The News is Getting Better all the Time", encourages optimism. Messages emphasize personal control, explaining that every day individuals can take steps to control their own cancer risks. For example, don't smoke or use tobacco in any form; eat foods high in fiber and low in fat; and include fresh fruits, vegetables, and whole grain cereals in your daily diet.

The program is being implemented in two phases. Phase I relies primarily on mass-media efforts to create awareness of prevention messages and to encourage people to learn about cancer prevention from a free NCI booklet available by calling 1-800-4-CANCER. With Phase II of the program, which began in 1985, the emphasis shifted from the general public toward populations at greater than average risks, and in May, NCI launched a program for Black Americans. Efforts are also underway to reach Hispanics, Asian Americans, children and youth, and women.

The program also initiated a diet and nutrition education program in 1985. A free booklet "Diet, Nutrition and Cancer Prevention: A Guide to Food Choices", which provides many suggestions for more healthful eating habits, was published and distributed.

Outstanding Investigator Grant (OIG)

The Outstanding Investigator Grant is a new seven-year renewable grant which is intended to provide stable support to an investigator who has been conspicuously productive in cancer research in the recent past. A total of 99 applications were subjected to review in 1985. Over 300 reviewers participated in the peer-review process.

	(Dollars in Thousands)				
	Number	Priority Score	Costs		
Approved	. 99		\$46,240		
Awarded by NCI	23	155	7,896		

PDQ Database Licensing

The International Cancer Information Center (ICIC), Office of International Affairs (OIA), NCI, serves as the focal point for the collection and dissemination of scientific data on all research related to cancer biology, etiology, prevention, and treatment. A major effort of the ICIC has been the development of a user friendly database on cancer treatment. This database, known as PDQ, is being utilized to speed the dissemination of information on progress in cancer treatment to practicing physicians throughout the world. In conjunction with the National Library of Medicine (NLM), NCI distributes PDQ through the MEDLARS system at over 2,800 medical libraries and to individual physicians who request personal PDQ codes.

In order to facilitate more widespread use of the PDQ database, the NCI also makes PDQ tapes available to commercial vendors for distribution to physicians. Three vendors, BRS/Saunders (COLLEAGUE) of New York, Mead Data Central

(MEDIS) of Dayton, Ohio, and TELMED, a firm based in Geneva, Switzerland, have signed licensing agreements with NCI. The NCI is actively seeking additional vendors to distribute PDQ to physicians worldwide. Interested parties should contact:

PDQ Coordinator
International Cancer Information Center
Office of International Affairs
National Cancer Institute
9030 Old Georgetown Road
Bethesda, Maryland 20892

Supercomputer

The past decade has witnessed the advent of a "biological revolution"—gene cloning, rapid DNA sequencing, and the application of monoclonal antibodies in the detection and treatment of disease. This has led to a complex of data that, like the study of DNA previously, would seem to be impossible to fully analyze. With the rapid increase in computer technology, the use of supercomputers in biomedical research brings the solution to these extremely complex problems into the realm of reality. To meet this need, NCI has acquired a supercomputer to be housed at the Frederick Cancer Research Facility.

There are a number of urgent scientific problems that need the power of a supercomputer. These include: analysis of the growing data bases of nucleic acid and protein sequences; experimental design of modified genes and proteins; X-ray crystallography in the analysis of the structure of genes and proteins; and molecular modeling in terms of drug design, enzyme inhibitors and various permutations.

The application of supercomputer technology is bound to accelerate our knowledge of biological processes and of life itself—rapidly increasing our ability to prevent and treat cancer. The supercomputer is scheduled to be operational in April 1986.

NATIONAL CANCER PROGRAM NATIONAL CANCER INSTITUTE

DIRECTOR'S BIOGRAPHY

Vincent T. DeVita, Jr., M.D.

Vincent T. DeVita, Jr., M.D., has served as Director of the National Cancer Institute (NCI) since his Presidential appointment on July 9, 1980. Dr. DeVita joined NCI initially in 1963 as a clinical associate in the Laboratory of Chemical Pharmacology, leaving in 1965 to complete his advanced training in medicine at Yale—New Haven Medical Center.

He served NCI consecutively as a senior investigator in the Solid Tumor Service, Head of the Solid Tumor Service, Chief of the Medicine Branch, and Director of the Division of Cancer Treatment from 1974 until his appointment as NCI director. In addition, he has served concurrently as NCI Clinical Director since 1975.

Dr. DeVita earned his B.S. degree at the College of William and Mary in 1957. He was awarded his M.D. degree with distinction by The George Washington University School of Medicine in 1961. He was Associate Professor of Medicine from 1971 to 1975 and, since 1975, Professor of Medicine at The George Washington University School of Medicine.

In 1972, Dr. DeVita received the Albert and Mary Lasker Medical Research Award for his contribution to the cure of Hodgkin's disease. In 1980, he was awarded the Griffuel Prize by the French Association for the Development of Research on Cancer, again for his important contributions to cancer chemotherapy, particularly the development of multiple-drug therapy for Hodgkin's disease and diffuse histiocytic lymphoma.

He was awarded an honorary Doctor of Science degree from the College of William and Mary in 1982, the Alumni Achievement Award from The George Washington University, and an honorary Doctor of Science degree from Ohio State University in 1983, and an honorary Doctor of Science degree from The George Washington University School of Medicine in 1984. He was elected to the Institute of Medicine of the National Academy of Sciences and received

several awards in 1985. The awards are the Pierluigi Nervi Award in Italy, the American Cancer Society's Medal of Honor, and the Second Annual Award from the American Italian Foundation for Cancer Research.

He is past-president and board member of the American Society of Clinical Oncology, has served on the board of directors of the American Association for Cancer Research and as a member of the panel of consultants to the International Union Against Cancer.

Dr. DeVita serves on the editorial boards of numerous scientific journals and is author and coauthor of more than 300 scientific articles. In addition, he is one of the editors and authors of Cancer: Principles and Practice of Oncology, a comprehensive textbook in the field of cancer medicine.

PRESIDENT'S CANCER PANEL

EXPIRATION OF APPOINTMENT

Armand Hammer, M.D., Chairman 1987
Occidental International Corporation
Washington, D.C.

William P. Longmire, Jr., M.D.
Center for Health Sciences
University of California
Los Angeles, California

1988

John A. Montgomery, Ph.D. Southern Research Institute Birmingham, Alabama 1986

EXECUTIVE SECRETARY

Elliott H. Stonehill, Ph.D. National Cancer Institute Bethesda, Maryland

NATIONAL CANCER ADVISORY BOARD

APPOINTEES	EXPIRATION OF APPOINTMENT		EXPIRATION OF APPOINTMENT
Dr. David Korn, Chairman Stanford University Stanford, California	1990	Dr. Geza J. Jako Institute for Research in Laser Surgery Melrose, Massachusetts	1988
Mr. Richard A. Bloch Kansas City, Missouri	1988	Dr. Joseph G. Katterhagen Tacoma General Hospital	1986
Dr. Roswell K. Boutwell Radiation Effects Research Foundation Minami-ward Hiroshima 730, Japan	1990	Tacoma, Washington Ms. Rose Kushner Breast Cancer Advisory Center Kensington, Maryland	1986
Dr. Victor Braren Vanderbilt University School of Medicine Nashville, Tennessee	1988	Ann Landers Field Newspaper Syndicate Chicago, Illinois	1986
Mrs. Helene G. Brown Jonsson Comprehensive Cancer Center Los Angeles, California	1990	Dr. LaSalle D. Lefall, Jr. Howard University Hospital Washington, DC	1986
Dr. Ed L. Calhoon Beaver, Oklahoma	1988	Dr. Enrico Mihich Roswell Park Memorial Hospital	1990
Dr. Tim Lee Carter Tompkinsville, Kentucky	1988	Buffalo, New York Dr. William E. Powers	1986
Dr. Gertrude B. Elion Burroughs Wellcome Company	1990	Harper Grace Hospital Detroit, Michigan	
Research Triangle Park, North Carolina Dr. Robert C. Hickey M.D. Anderson Hospital and Tumor Institut Houston, Texas	1986 te	Dr. Louise C. Strong M.D. Anderson Hospital and Tumor Institut Houston, Texas	1990 e
EX OFFICIO MEMBERS			
The Honorable William E. Brock		Dr. David P. Rall National Institute of Environmental Health	Sciences

Washington, DC

Dr. John Gronvall Veterans Administration Washington, DC

The Honorable Margaret M. Heckler Secretary for Health and Human Services

Dr. George A. Keyworth Office of Science and Technology Policy Washington, DC

The Honorable William E. Mayer Department of Defense Washington, D.C.

Dr. J. Donald Millar National Institute for Occupational Safety and Health Atlanta, Georgia

Research Triangle Park, North Carolina

Mr. Lee Thomas Environmental Protection Agency Washington, DC

Mr. Terrance Scanlon Consumer Product Safety Commission Washington, DC

Dr. James B. Wyngaarden National Institutes of Health Bethesda, Maryland

Dr. Frank E. Young Food and Drug Administration Rockville, Maryland

ALTERNATES TO EX OFFICIO MEMBERS

Dr. Ralph E. Yodaiken Department of Labor Washington, DC

Dr. Hollis Boren Veterans Administration Washington, DC

Dr. Robert Rabin Office of Science and Technology Policy Washington, DC

Vice Admiral Lewis H. Seaton Office of Chief of Naval Operations Washington, DC

Dr. Elliott S. Harris National Institute for Occupational Safety and Health Atlanta, Georgia Dr. Elizabeth L. Anderson Environmental Protection Agency, RD 675 Washington, DC

Dr. Andrew Ulsamer Consumer Product Safety Commission Bethesda, Maryland

Food and Drug Administration Rockville, Maryland

EXECUTIVE SECRETARY

Mrs. Barbara S. Bynum National Cancer Institute, NIH Bethesda, Maryland

DIVISION BOARDS OF SCIENTIFIC COUNSELORS

DIVISION OF CANCER BIOLOGY AND DIAGNOSIS

Matthew D. Scharff, M.D., Ch	airperson 198		*000	Harold E. Varmus, M.D.	1986	
D. Bernard Amos, M.D. Stephen B. Baylin, M.D. George I. Bell, Ph.D. Barbara A. Hamkalo, Ph.D. Nancy E. Kleckner, Ph.D.	1986 1989 1989 1987 1987	Joseph S. McGuire, Jr., M.D. Peter C. Nowell, M.D. Robert L. Perlman, M.D., Ph.D. Sondra Schlesinger, Ph.D. John D. Stobo, M.D.	1988 1986 1987 1986 1986	Sandra L. White, Ph.D. Ray J. Wu, Ph.D. Susan Zolla-Pazner, Ph.D.	1989 1987 1986	

DIVISION OF CANCER TREATMENT

Samuel A. Wells, Jr., M.D., Ch Dani P. Bolognesi, M.D. David G. Bragg, M.D. Paul Calabresi, M.D. Max D. Cooper, M.D. Lawrence H. Einhorn, M.D. Mortimer M. Elkind, Ph.D.	1986 1985 1986 1986 1986 1989 1986	Karen K. Fu, M.D. Israel David Goldman, M.D. Leon Goodman, Ph.D. Robert L. Goodman, M.D. Susan B. Horwitz, Ph.D. John H. Kersey, M.D.	1985 1986 1986 1987 1986 1985	Rodrigue Mortel, M.D. Efraim Racker, M.D. Alan S. Rosenthal, M.D. Geraldine Schechter, M.D.	1985 1986 1986 1989
--	--	--	--	--	------------------------------

DIVISION OF CANCER ETIOLOGY

G. Barry Pierce, M.D., Chairpe Edward Bresnick, Ph.D. Janet S. Butel, Ph.D. C.C. Cheng, Ph.D. Donald S. Davies, Ph.D. Renato Dulbecco, M.D. Myron Essex, D.V.M., Ph.D.	1986 1989 1986 1986 1986 1986 1986	William M. Haenszel, M.A. William T. London, M.D. Peter N. Magee, M.D. Maureen T. O'Berg, Ph.D. Nicholas L. Petrakis, M.D. Roy Shore, Ph.D.	1986 1989 1989 1988 1988 1985 1988	George F. Vande Woude Lee W. Wattenberg, M.D. Noel S. Weiss, M.D. Mimi C. Yu, Ph.D.	1989 1987 1989 1988
--	--	--	--	--	------------------------------

DIVISION OF CANCER PREVENTION AND CONTROL

Erwin P. Bettinghaus, Ph.D., Phillip G. Archer, Sc.D. Robert W. Day, M.D. Johanna T. Dwyer, D.Sc. Jerome J. DeCosse, M.D. Saxon Graham, Ph.D.	1986	David Mark Hegsted, Ph.D.	1986	Robert J. McKenna, M.D.	1989
	1986	Laurence N. Kolonel, M.D., Ph.D.	1986	David J. Sencer, M.D.	1988
	1989	Lewis Kuller, M.D., Dr. P.H.	1987	Louis W. Sullivan, M.D.	1987
	1986	William C. Levin, M.D.	1988	John E. Ultmann, M.D.	1988
	1986	Virgil Loeb, Jr., M.D.	1987	Kenneth E. Warner, Ph.D.	1988

NATIONAL CANCER INSTITUTE EXECUTIVE COMMITTEE MEMBERS

Dr. Vincent T. DeVita, Jr. Director

Dr. Peter Fischinger Deputy Director

Mr. Philip Amoruso
Associate Director for Administrative Management

Dr. Richard Adamson
Director, Division of Cancer Etiology

Mrs. Barbara Bynum
Director, Division of Extramural Activities

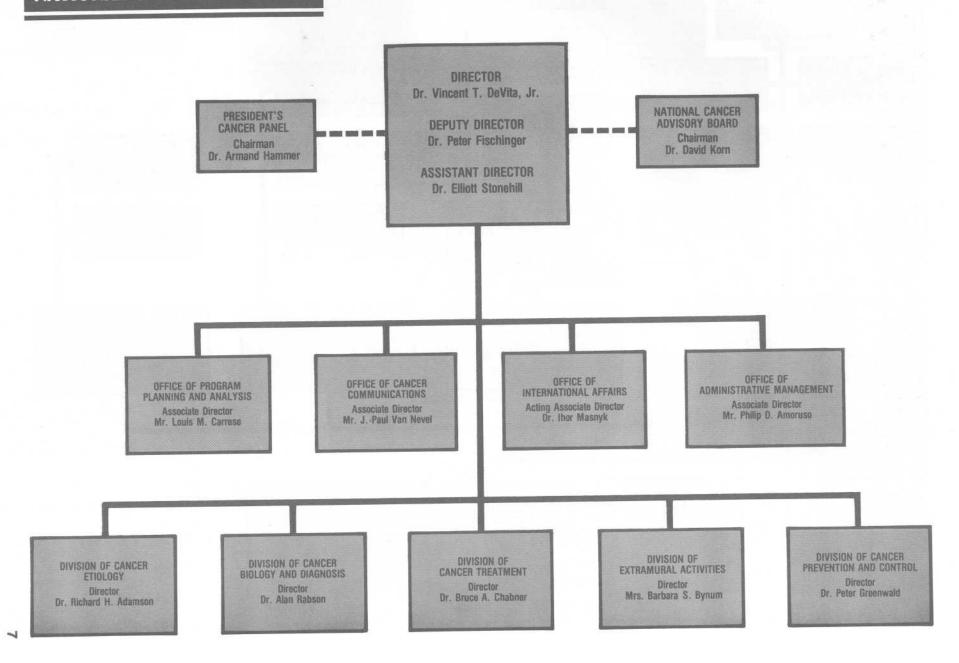
Dr. Bruce Chabner
Director, Division of Cancer Treatment

Dr. Peter Greenwald
Director, Division of Cancer Prevention and Control

Dr. Alan Rabson
Director, Division of Cancer Biology and Diagnosis

Ms. Iris Schneider Executive Secretary

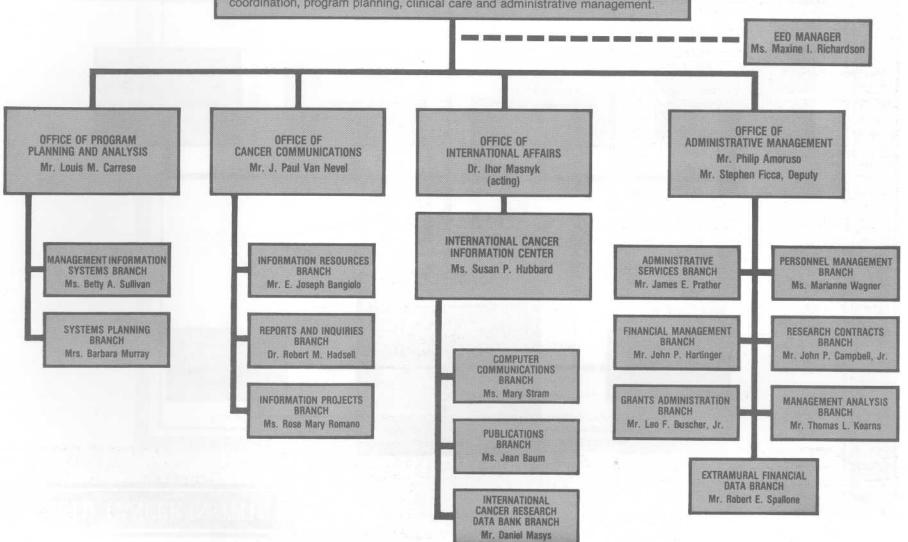
NATIONAL CANCER INSTITUTE

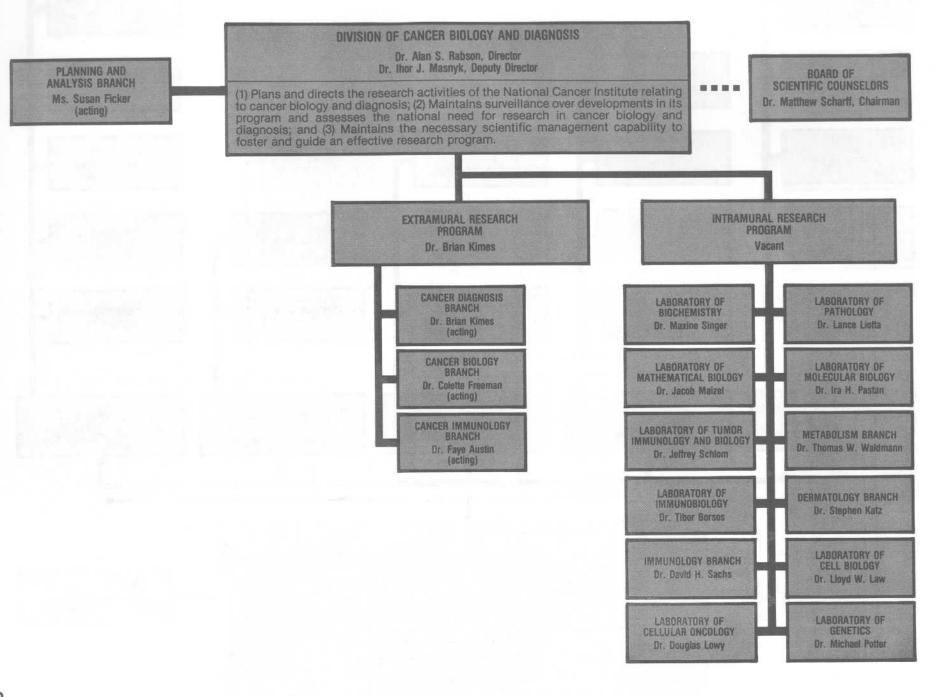


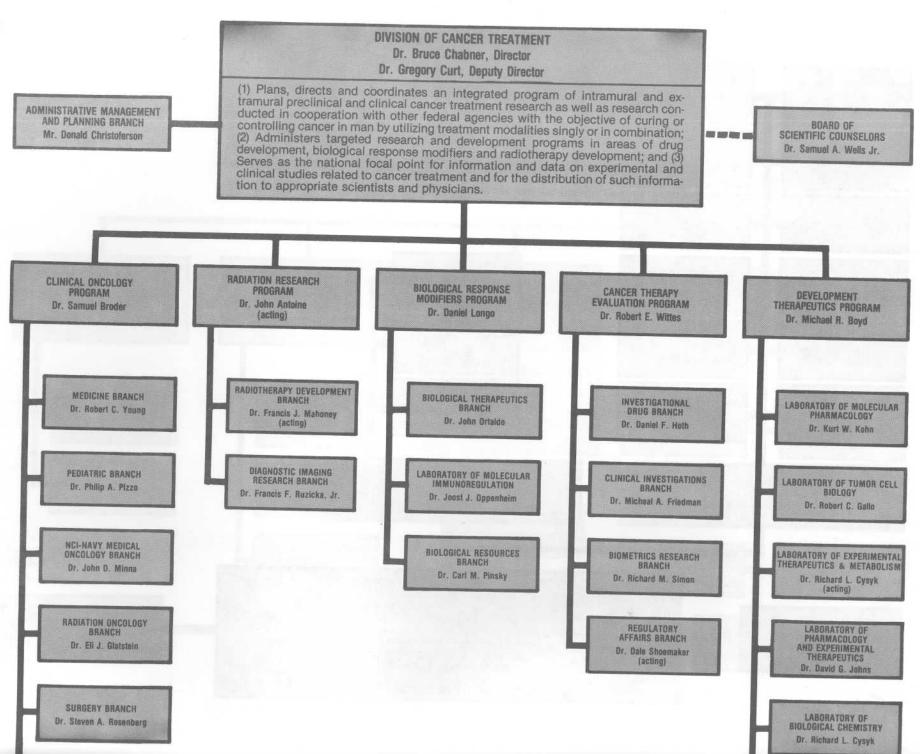
OFFICE OF THE DIRECTOR

Dr. Vincent T. DeVita, Jr., Director Dr. Peter Fischinger, Deputy Director

(1) Serves as the focal point for the National Cancer Program; (2) Develops a National Cancer Plan and monitors implementation of the Plan; (3) Directs and coordinates the Institute's programs and activities; and (4) Develops and provides policy guidance and staff direction to the Institute's programs in areas such as program coordination, program planning, clinical care and administrative management.







CLINICAL PHARMACOLOGY BRANCH Dr. Charles E. Myers ANIMAL GENETICS AND PRODUCTION BRANCH Dr. Joseph G. Mayo

DRUG SYNTHESIS AND CHEMISTRY BRANCH

Dr. Ven Narayanan

NATURAL PRODUCTS BRANCH

Dr. Matthew Suffness

DRUG EVALUATION BRANCH

Dr. John M. Venditti

PHARMACEUTICAL RESOURCES BRANCH

Mr. J. Paul Davignon

TOXICOLOGY BRANCH Dr. Charles K. Grieshaber

INFORMATION TECHNOLOGY BRANCH

Dr. G.W.A. Milne

EXTRAMURAL RESEARCH & RESOURCES BRANCH

Or. Moreshwar Nadkarni

ADMINISTRATIVE MANAGEMENT BRANCH Mr. Mark Kochevar **DIVISION OF CANCER ETIOLOGY**

Dr. Richard H. Adamson, Director Dr. Susan M. Sieber, Deputy Director

(1) Plans and directs a national program of basic research including laboratory, field, epidemiologic and biometric research on the cause and natural history of cancer and means for preventing cancer. This program is implemented by intramural research, research grants, cooperative agreements, and contracts; (2) Evaluates mechanisms of cancer induction and promotion by chemicals, viruses and environmental agents; (3) Serves as the focal point for the Federal government on the synthesis of clinical, epidemiological, and experimental data relating to cancer causation; and (4) participates in the evaluation of and advises the Institute Director on program related aspects of other basic research activities as they relate to cancer cause and prevention.

BOARD OF SCIENTIFIC COUNSELORS

Dr. G. Barry Pierce, Chairman

BIOLOGICAL CARCINOGENESIS PROGRAM Dr. Richard Adamson (acting)

> LABORATORY OF CELLULAR AND MOLECULAR BIOLOGY Dr. Stuart Aaronson

LABORATORY OF MOLECULAR ONCOLOGY Dr. Takis Papas

LABORATORY OF MOLECULAR VIROLOGY Dr. George Khoury

> LABORATORY OF TUMOR VIRUS BIOLOGY

Dr. Peter Howley

LABORATORY OF VIRAL CARCINOGENESIS Or. Stephen O'Brien (acting)

BIOLOGICAL CARCINOGENESIS BRANCH Dr. Jack Gruber CHEMICAL AND PHYSICAL CARCINOGENESIS PROGRAM

Dr. Richard Adamson (acting)

Dr. Joseph DiPaolo

LABORATORY OF CELLULAR CARCINOGENESIS AND TUMOR PROMOTION Dr. Stuart Yusda

> LABORATORY OF CHEMOPREVENTION Dr. Michael Sporn

LABORATORY OF COMPARATIVE CARCINOGENESIS Dr. Jerry Rice

LABORATORY OF EXPERIMENTAL CARCINOGENESIS Dr. Snorri Thorgeirsson LABORATORY OF EXPERIMENTAL PATHOLOGY Dr. Umberto Saffiotti

LABORATORY OF HUMAN CARCINOGENESIS Dr. Curt Harris

LABORATORY OF MOLECULAR CARCINOGENESIS Dr. Harry Gelboin

CHEMICAL AND PHYSICAL CARCINOGENESIS BRANCH Dr. David Longfellow

> LOW LEVEL RADIATION EFFECTS BRANCH Dr. Bruce Wachholz

EPIDEMIOLOGY AND BIOSTATISTICS PROGRAM
Dr. Joseph Fraumeni, Jr.

BIOSTATISTICS BRANCH Dr. William Blot

. . .

CLINICAL EPIDEMIOLOGY BRANCH Dr. Robert Miller

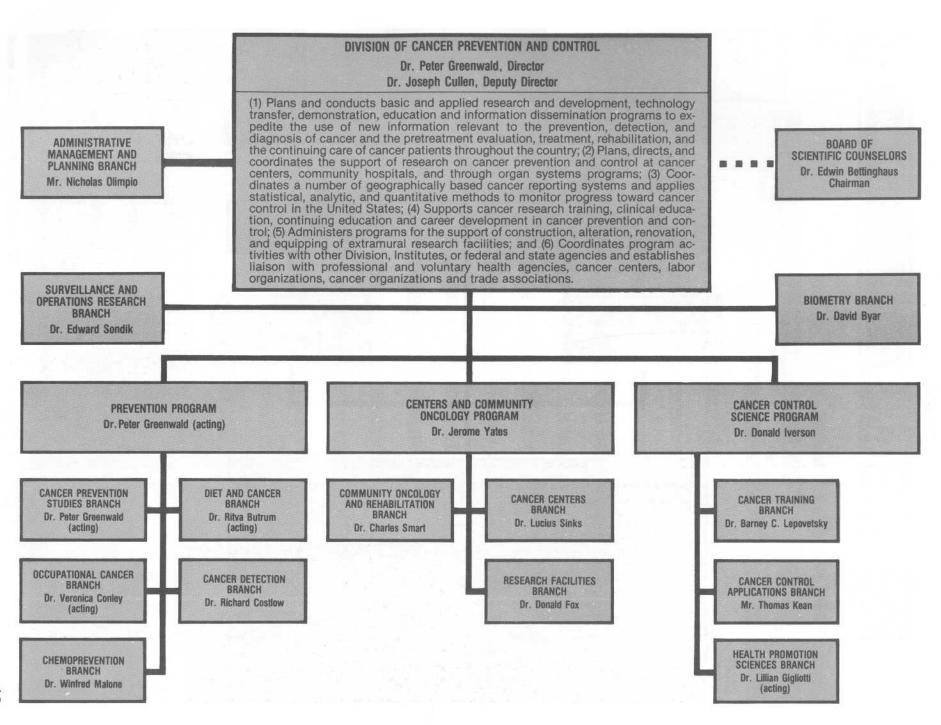
ENVIRONMENTAL EPIDEMIOLOGY BRANCH Dr. Robert Hoover

> RADIATION EPIDEMIOLOGY BRANCH

> Dr. John Boice

EXTRAMURAL PROGRAMS
BRANCH

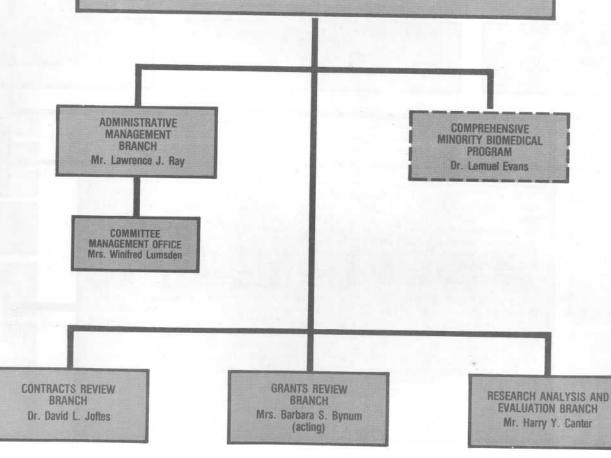
Dr. John Cooper



DIVISION OF EXTRAMURAL ACTIVITIES

Mrs. Barbara S. Bynum, Director

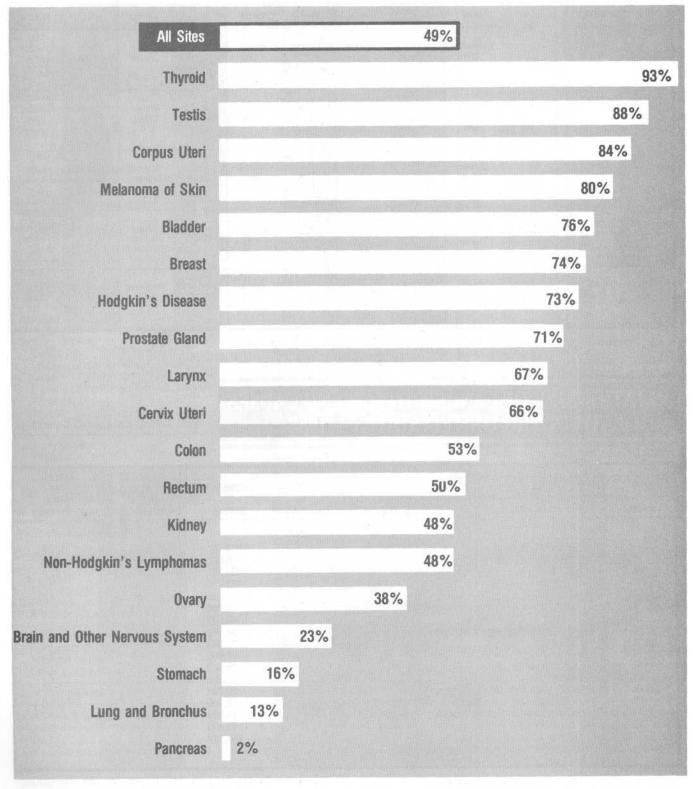
(1) Administers and directs the Institute's grant and contract review and processing activities; (2) Provides initial technical and scientific merit review of grants and contracts for the Institute; (3) Represents the Institute on overall NIH extramural and collaborative program policy committees, coordinates such policy within NCI, and develops and recommends NCI policies and procedures as related to the review of grants and contracts; (4) Coordinates the Institute's review of research grant and training programs with the National Cancer Advisory Board; (5) Coordinates the implementation of committee management policies within the Institute and provides the Institute's staff support for the National Cancer Advisory Board; (6) Coordinates program planning and evaluation in the extramural area; (7) Provides scientific reports and analyses to the Institute's grant and contract programs; and (8) Coordinates and administers the Institute's participation in minority research and training efforts.



5-YEAR RELATIVE SURVIVAL RATES

5-Year Relative Survival Rates By Primary Site for Cancer Patients (all races, both sexes) Diagnosed 1977-1982

National Cancer Institute SEER Program



NUMBER OF DEATHS FOR THE FIVE LEADING CANCER SITES BY AGE GROUP AND SEX – 1982

ALL	AGES	UNDER	15	15-34		35-54		55-74		75+	
MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Lung 79,107	Breast 37,411	Leukemia 465	Leukemia 334	Leukemia 744	Breast 687	Lung 9,451	Breast 7,929	Lung 51,110	Lung 20,154	Lung 18,366	Colon & Rectum 13,726
Colon & Rectum 26,914	Lung 32,117	Brain & CNS 258	Brain & CNS 236	Brain & CNS 453	Leukemia 591	Colon & Rectum 2,227	Lung 4,838	Colon & Rectum 14,342	Breast 18,931	Prostrate 13,884	Breast 9,853
Prostrate 24,013	Colon & Rectum 28,283	Endo- crine 120	Endo- crine 89	Non- Hodgkin's Lymphomas 354	Uterus 320	Pancreas 1,225	Colon & Rectum 2,013	Prostate 9,816	Colon & Rectum 12,372	Colon & Rectum 10,127	Lung 7,009
Pancreas 11,227	Ovary 11,057	Non- Hodgkin's Lymphomas 120	Connective Tissue 52	Hodgkin's Disease 301	Brain & CNS 296	Brain & CNS 1,127	Uterus 1,807	Pancreas 6,536	Ovary 6,156	Pancreas 3,417	Pancreas 4,566
Leukemia 9,358	Pancreas 10,780	Connective Tissue 54	Bone 39	Melanoma of Skin 294	Non- Hodgkin's -ymphomas 192	Leukemia 1,111	Ovary 1,667	Stomach 4,625	Pancreas 5,424	Bladder 3,292	Uterus 3,185

Source: Vital Statistics of the United States, 1982.

RELATIONSHIP OF CANCER TO LEADING CAUSES OF DEATH IN THE UNITED STATES — 1982

RANK	CAUSE OF DEATH	NUMBER OF DEATHS	DEATH RATE PER 100,000 POPULATION	PERCENT OF TOTAL DEATHS
	ALL CAUSES	4 074 707		400.0
1	Diseases of Heart	1,974,797 755,592	852.0	100.0
2	CANCER	433,795	326.0 187.2	38.3 22.0
3	Stroke	157,710	68.0	8.0
4	Accidents	94,082	40.6	4.8
5	Bronchitis, Emphysema & Asthma	59,869	25.8	3.0
6	Pneumonia & Influenza	48,886	21.1	2.5
7	Diabetes Mellitus	34,583	14.9	1.8
8	Suicide	28,242	12.2	1.4
9	Cirrhosis of Liver	27,690	11.9	1.4
10	Arteriosclerosis	26,823	11.6	1.3
11	Homicide	22,358	9.6	1.1
12	Diseases of Infancy	20,794	9.0	1.1
13	Nephritis & Nephrosis	18,102	7.8	0.9
14	Congenital Abnormalities	13,604	5.9	0.7
15	Septicemia & Pyemia	11,493	5.0	0.6
	Other & III-defined	221,174	95.4	11.1

Source: National Center for Health Statistics, 1982.

ESTIMATED NEW CANCER CASES AND DEATHS BY SEX FOR ALL SITES – 1985

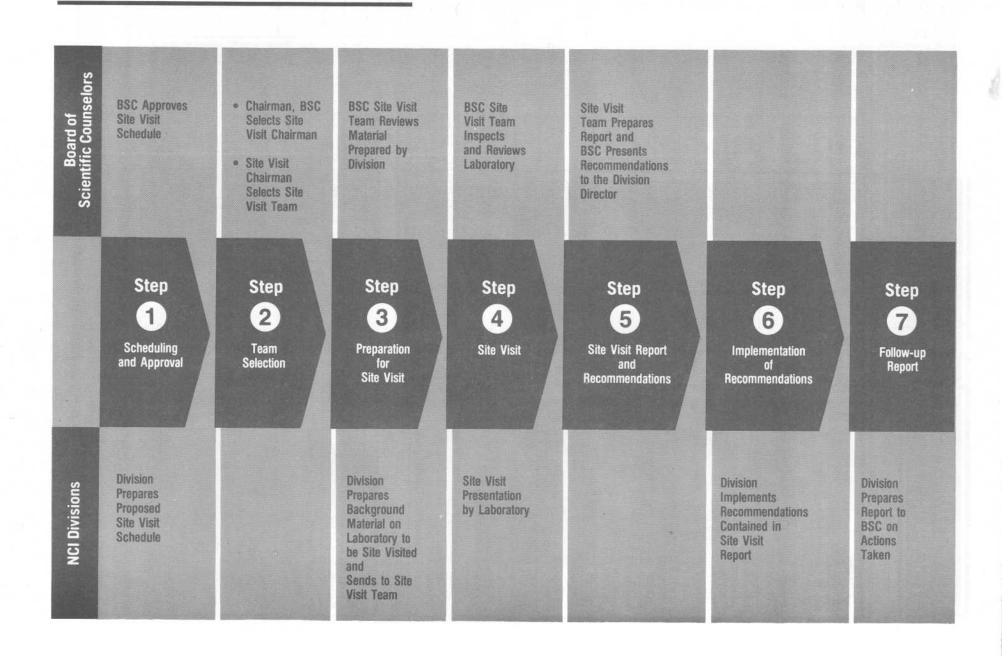
	ESTI	MATED NEW CAS	ESTIMATED DEATHS			
SITE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
All Sites	910,0001	455,000 ¹	455,000 ¹	462,000	249,000	213,000
Buccal Cavity & Pharynx (ORAL) Lip Tongue Mouth Pharynx	28,900 4,500 5,200 10,400 8,800	19,500 4,000 3,300 6,100 6,100	9,400 500 1,900 4,300 2,700	9,500 175 2,050 2,975 4,300	6,450 150 1,400 1,900 3,000	3,050 25 650 1,075 1,300
Digestive Organs Esophagus Stomach Small Intestine Large Intestine Rectum Liver & Biliary Passages Pancreas Other & Unspecified Digestive	215,200 9,400 24,700 2,200 96,000 42,000 13,400 25,200 2,300	109,500 6,600 15,000 1,100 44,000 22,000 6,700 13,000 1,100	105,700 2,800 9,700 1,100 52,000 20,000 6,700 12,200 1,200	119,800 8,800 14,300 800 51,600 8,300 10,400 24,200 1,400	62,600 6,400 8,400 400 24,600 4,400 5,200 12,500 700	57,200 2,400 5,900 400 27,000 3,900 5,200 11,700
Respiratory System Larynx LUNG Other & Unspecified Respiratory	159,200 11,500 144,000 3,700	110,100 9,500 98,000 2,600	49,100 2,000 46,000 1,100	130,650 3,750 125,600 1,300	90,900 3,100 87,000 800	39,750 650 38,600 500
Bone Connective Tissue SKIN	2,000 5,000 22,000 ²	1,100 2,700 11,000 ²	900 2,300 11,000 ²	1,400 2,800 7,400 ⁴	800 1,300 4,400	1,500 3,000
BREAST	119,900 ³	900 ³	119,000 ³	38,700	300	38,400
Genital Organs Cervix Uteri Corpus, Endometrium Ovary Other & Unspecified Genital, Female Prostate Testis Other & Unspecified Genital, Male	167,200 15,000 ³ 37,000 18,500 4,400 86,000 5,000 1,300	92,300 86,000 5,000 1,300	74,900 15,000 ³ 37,000 18,500 4,400 —	48,850 6,800 2,900 11,600 1,100 25,500 500 450	26,450 — — — 25,500 500 450	22,400 6,800 2,900 11,600 1,100 —
Urinary Organs Bladder Kidney & Other Urinary	59,700 40,000 19,700	41,500 29,000 12,500	18,200 11,000 7,200	19,700 10,800 8,900	12,700 7,300 5,400	7,000 3,500 3,500
Eye	1,800	900	900	400	200	200
Brain & Central Nervous System	13,700	7,700	6,000	10,100	5,500	4,600
Endocrine Glands Thyroid Other Endocrine	11,700 10,600 1,100	3,500 2,900 600	8,200 7,700 500	1,700 1,100 600	700 400 300	1,000 700 300
Leukemias Lymphocytic Leukemia Granulocytic Leukemia Monocytic Leukemia	24,600 11,800 12,100 700	13,600 6,700 6,500 400	11,000 5,100 5,600 300	17,200 6,500 10,300 400	9,500 3,800 5,500 200	7,700 2,700 4,800 200
Other Blood & Lymph Tissues Hodgkin's Disease Multiple Myeloma Other Lymphomas	43,300 6,900 9,900 26,500	22,400 3,900 5,000 13,500	20,900 3,000 4,900 13,000	22,300 1,500 7,400 13,400	11,500 900 3,800 6,800	10,800 600 3,600 6,600
All Other & Unspecified Sites	35,800	18,300	17,500	31,500	15,700	15,80

NOTE: The estimates of new cancer cases are offered as a rough guide and should not be regarded as definitive. Especially note that year-to-year changes may only represent improvements in the basic data.

¹Carcinoma in situ and non-melanoma skin cancers not included in totals. Carcinoma in situ of the uterine cervix accounts for over 45,000 new cases annually and carcinoma in situ of the female breast accounts for over 5,000 new cases annually. Non-melanoma skin cancer accounts for about 400,000 new cases annually.

²Melanoma only. ³Invasive cancer only. ⁴Melanoma 5,500; other skin 1,900.

NCI INTRAMURAL REVIEW PROCESS



RESEARCH POSITIONS AT THE NATIONAL CANCER INSTITUTE 1

The National Cancer Institute recognizes that one of the most valuable resources to be drawn upon in the fight against cancer is the wealth of scientific talent available in the U.S. and around the world. In an effort to attract and maintain the highest quality scientific staff, two personnel systems are used: the U.S. Civil Service System and the PHS Commissioned Corps. In addition, the Staff Fellowship Program and the NIH Visiting Program have been designed to meet special needs. Other special programs are available for those who qualify.

POSITION	ELIGIBILITY	ANNUAL SALARY	MECHANISM OF ENTRY		
I. CIVIL SERVICE					
A . Civil Service (tenured)	Appropriate advanced education, experience and knowledge needed by NCI to conduct its programs.	Minimum starting: Ph.D.—\$37,599 Physicians—\$50,822 Maximum: \$68,700	Office of Personnel Management, Contact Director or Laboratory Chief in area of interest or the NCI Personnel Office.		
II. SPECIAL APPOINTMENT OF	EXPERTS AND CONSULTANTS				
A. Special Appointment of Experts and Consultants (non-tenured appointment which can be extended up to 4 years).	Applicants shall possess outstanding experience and ability as to justify recognition as authorities in their particular fields of activity.	Equivalent to the salary range of GS-13 through GS-18. Maximum: \$68,700	Recommendation by Division Directors. Final approval rests with the Director, NCI.		
III. MEDICAL STAFF FELLOWS	S				
A . Medical Staff Fellows	Appointment for 2 or 3 years with an additional 1-year extension for an initial 2-year appointment. Graduate of accredited medical or osteopathic school and completion of internship. Completion of 2 or 3 years of clinical training beyond the M.D. degree and demonstrated outstanding ability to conduct successfully, preestablished programs in both clinical and laboratory research.		Apply to the Clinical and Professional Education Section, Clinical Center, National Institutes of Health 20892.		
Medical Staff Fellows in Pharmacology (PRAT Fellows). For physicians committed to research careers in pharmaco- logical sciences, or clinical pharmacology.	Appointment for 2 or 3 years with an additional 1-year extension for an initial 2-year appointment. Graduate of accredited medical or osteopathic school and completion of internship. Completion of 2 or 3 years of clinical training beyond the M.D. degree and demonstrated outstanding ability to conduct successfully, preestablished programs in both clinical and laboratory research.	\$30,000-\$34,000	Apply to the Clinical and Professional Education Section, Clinical Center, National Institutes of Health 20892.		
IV. VISITING PROGRAM (limite	od tenure) ²				
A. Visiting Fellow (maximum 3 years)	Fellow 1-3 years postdoctoral experience or		Contact Director or Laboratory Chief in area of interest.		
B. Visiting Associates (1 year with renewals to end of project)	3+ years postdoctoral experience or training with appropriate knowledge needed by NCI.	\$21,804-\$44,105	Contact Director or Laboratory Chief in area of interest.		
C . Visiting Scientist (duration of project)	6+ years postdoctoral experience with ap- propriate unusual experience and know- ledge needed.	\$31,619-\$68,700	Contact Director or Laboratory Chief in area of interest.		

¹Does not necessarily indicate that positions are currently available at the National Cancer Institute. ²Under most circumstances, the various visiting programs are limited to non-citizens.

V. STAFF FELLOWSHIPS

POSITION	ELIGIBILITY	ANNUAL SALARY	MECHANISM OF ENTRY			
A . Staff Fellowship	Physician or other doctoral degree equiva- lent awarded within last 5 years, U.S. citizen or non-citizen eligible for naturali- zation within 4 years. Maximum seven-year appointment.	Staff Fellows Physicians \$20,688-\$34,312 Other Doctorates \$17,000-\$36,889 Senior Staff Fellows Physicians \$23,439-\$47,788 Other Doctorates \$20,688-\$41,358	Contact Director or Laboratory Chief in area of interest or the NCI Personnel Office.			

VI. CIVIL SERVICE SUMMER EMPLOYMENT PROGRAMS

A . Summer Clerical Program	Must be 18 years of age or older (16 if high school graduate).	GS-1 through GS-4 Grade is based on education and/or experience.	Apply to NIH on or before March 15.		
8 . Summer Undergraduate Program	Students majoring in biological and/or physical sciences or related field, or applicants with appropriate experience.	GS-1 through GS-4 Grade is based on education and/or experience.	Apply to NIH by March 15.		
C . Summer Graduate Program	College graduate, graduate student, planning to attend graduate school, faculty member, or equivalent experience and/or education.	GS-5 through GS-12 For some occupations superior scholastic work may qualify for a higher grade level.	Apply to NIH by March 15.		
Summer Employment for Needy Youth	Educationally and economically disadvantaged youths in their formative years (must have reached 16th birthday).	Federal minimum wage.	Register with the local office of the State Employment service and apply to NIH.		
E . Stay-in-School Program	Substantially full-time or full-time student at least 16 years of age who needs earnings from employment to continue in school.	Salary is commensurate with duties assigned and student's education and/or experience.	Apply to NIH. No deadline required for applying. However, no new appointments are made between May 1 to August 30.		
F. The Federal Junior Fellowship Program	Graduating high school senior in a public or private school in the Metro. Wash., D.C. area. Must be in upper 10% of graduating class, have applied for admission to an accredited college or university and need financial assistance to attend school.	GS-1 through GS-4	Nominations are submitted directly to the Office of Personnel Management by high school principals or counselors.		

VII. SPECIAL PROGRAMS

Guest researcher spon- sored by organization other than NIH, PHS.	Determined by sponsoring organization.	Established by sponsoring organization.	Contact Director or Laboratory Chief in area of interest; also apply to sponsoring agency, e.g., American Cancer Society, Eleanor Roosevelt Cancer Foundation, Leukemia Society of America, Inc., etc.			
COSTEP Program (operates year-round)Maximum 120 days per 12-month period.	U.S. Citizen. Must have completed one year of study in a medical, dental or veterinary school; or a minimum of two years of baccalaureate program in a health-related field such as engineering, nursing, pharmacy, etc. May be enrolled in a master's or doctoral program in a health-related field (designated by the Assistant Secretary for Health). Physical requirements of PHS Commissioned Corps. Plans to return to college.	Pay and allowance of a Commissioned Officer, Junior Asst. Grade.	Apply to PHS Commissioned Corps, COSTEP SECTION, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20852.			
C . Fogarty International Scholars In Residence Program.	International reputation, productivity, demonstrated ability in biomedical field.	\$50,000 for 10 months.	Recommendation to Fogarty Center by Institute Director or Scientist. Contact Director in area of Interest.			

VIII. OTHER TRAINING PROGRAMS

dingright and

POSITION	ELIGIBILITY	ANNUAL SALARY	MECHANISMS OF ENTRY			
Cancer Control Science Associates (Three-year non-tenured Civil Service Position)	1)M.D./D.O., or accredited doctoral degree in an allied or public health profession, biomedical behavioral, or social science, or equivalent; 2) academic professional excellence supported by official transcripts; and four letters of reference; and 3) United States citizenship or meet one of the provisions which allow for the hiring of non-U.S. citizens. Information regarding the hiring of non-citizens may be obtained by calling the NCI Personnel Office.	First year for an M.D./D.O.or Ph.D. —\$31,044 or\$26,381 per annum respectively.	Program Coordinator, CCSAP NIH/NCI/ DCPC/CCAB, Blair Building Room 4A01 Bethesda, Maryland 20892.			
3. Biotechnology Fellow	Physicians with little or no experience or training in fundamental research, but with an interest in biotechnology including its application to prevention and new treatment and diagnostic techniques, would be eligible. Ph. D. scientists with little or no experience or training in clinically related programs, but with an interest in clinical applications of fundamental research methodology related to biotechnology would also be eligible. Typically, these candidates will have less than three years post-doctoral experience. The Biotechnology Training Program is established for United States citizens, or resident aliens who will be eligible for U.S. citizenship within four years.	First year: Ph.D.\$22,500 to \$28,000 Physicians-\$26,000 to \$32,000	Contact Division Director or Laboratory Chief in area of interest.			
: Nurse Trainee	Applications will be accepted from graduates of NLN accredited baccalaureate nursing programs. Each candidate must submit academic transcripts demonstrating a minimum of a "B" average in undergraduate work, three references regarding their academic and clinical capability, a letter describing their interest in the program, and a Personal Qualification Statement, SF-171. This program is also available to all new graduate applicants to the Cancer Nursing Service; some may not be aware of the program prior to their contact with Clinical Center.	Stipends for the pro- gram will be \$1,300 per month	Contact the Division of Cancer Treatment.			

SPECIAL TRAINING MECHANISMS: FISCAL YEAR 1985

Biotechnology Training Program

Why Needed:

- To provide training in fundamental sciences and clinical disciplines for physicians and Ph.D. scientists.
- To enhance cancer clinical programs through the rapid transfer and application of new techniques and fundamental knowledge leading to state-of-the-art prevention, diagnosis and treatment of cancer.
- To maintain a significant level of support for training in those disciplines related to biotechnology.

Program Provisions:

 Training assignments in modern biotechnology will emphasize the application of recombinant DNA and hybridoma technology to cancer clinical programs; emphasis also is in the areas of nutrition, clinical pharmacology, viral oncology, and biochemical and clinical epidemiology as clinical disciplines.

- The program is supervised by the Senior Scientific Coordinating Committee (the Executive Committee is currently serving in this role).
- Each candidate will have a training plan. Candidates and training plans will be approved by the Division Director and SSCC.
- Fellowships are from six months to two years, with the potential for an extension of up to three years.
- Fellowships are not subject to employment ceilings and there are no service/payback provisions.
- The program is limited to citizens or resident aliens eligible for citizenship.
- Candidates may apply to the NCI laboratory or branch that offers a program that best meets their training needs.

Status: It is expected that there will be six fellowships awarded by the first part of FY 1986.

Cancer Control Science Associates Program Why Needed:

 To increase the number of scientists highly qualified to conduct cancer prevention and control intervention research in order to fully realize the potential for major reductions in cancer rates. This in keeping with NCI's year 2000 goal.

Program Provisions:

- Allows for doctoral level scientists from a variety of academic disciplines to be exposed to a number of educational experiences in cancer prevention and control.
- Associates spend the first three months of their three-year program in an academic course that covers all aspects of cancer pre-

vention and control. For the next 21 months participants are assigned to one of the Division's operational branches where they engage in specific research projects and also receive exposure to the daily management and administration of federal research programs. For the last 12 months, Associates are assigned to a field research project at either a cancer center, major NCI research grantee/contractor, or a public health department.

 Interested candidates may apply to Ms. Nancy Gardner, Division of Cancer Prevention and Control.

Status: It is expected that a total of 15 associates will be recruited per year.

Cancer Nurse Training Program

Why Needed:

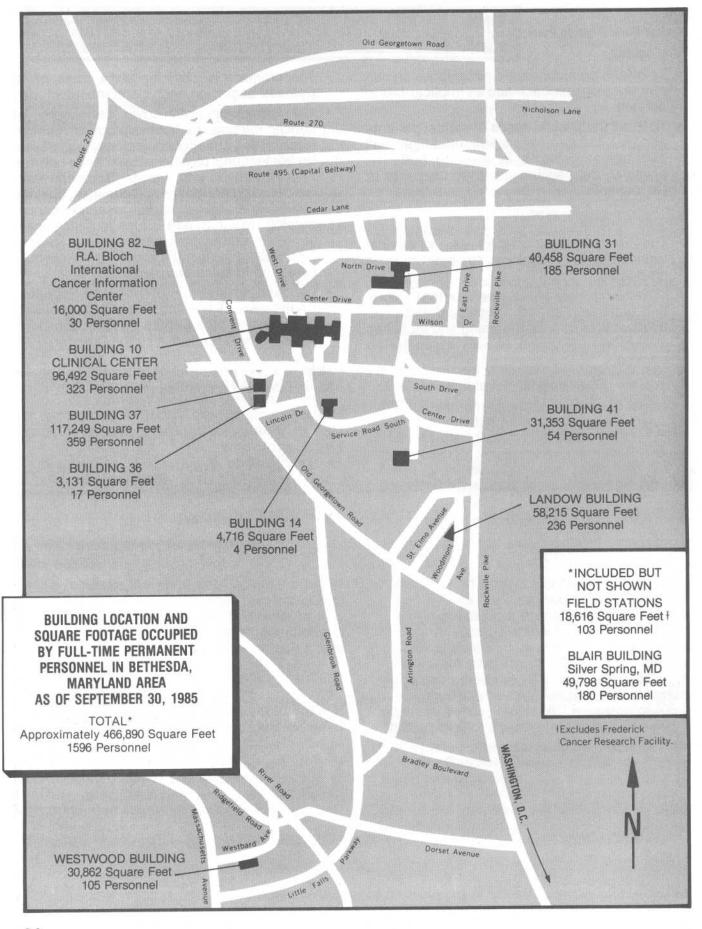
- To offer a comprehensive perspective on current oncology practice and its implications in nursing.
- To meet the special needs of cancer patients and their families which demand a high level of nursing practices in meeting both the physical and psychological requirements of the patients.

Program Provisions:

- The program is offered as a clinical traineeship in oncology to new nursing graduates.
- Traineeships are six to nine months in duration emphasizing both theoretical and practical aspects of cancer nursing and including classroom instruction as well as on-the-job training.

- The program is planning on a class of 10 trainees beginning each September/October.
- The curriculum will cover philosophy of cancer nursing, pathophysiology of cancer, epidemiology, diagnosis and staging, prevention/detection, psychosocial needs of the cancer patient and family, the child with cancer, current treatment modalities, specific cancers/major sites/current research, cancer nursing research, and issues in cancer care such as ambulatory care, use of current technology, aging, ethical dilemmas, costs of care, and hospice program.
- Candidates may apply to the Nurse Recruiter, Department of Nursing and will be reviewed and selected by a Candidate Selection Committee. Final approval is by the Director, DCT.

Status: It is expected that for the first year, seven candidates will be participating.



MAJOR STEPS IN THE BUDGET FORMULATION REVIEW PROCESS

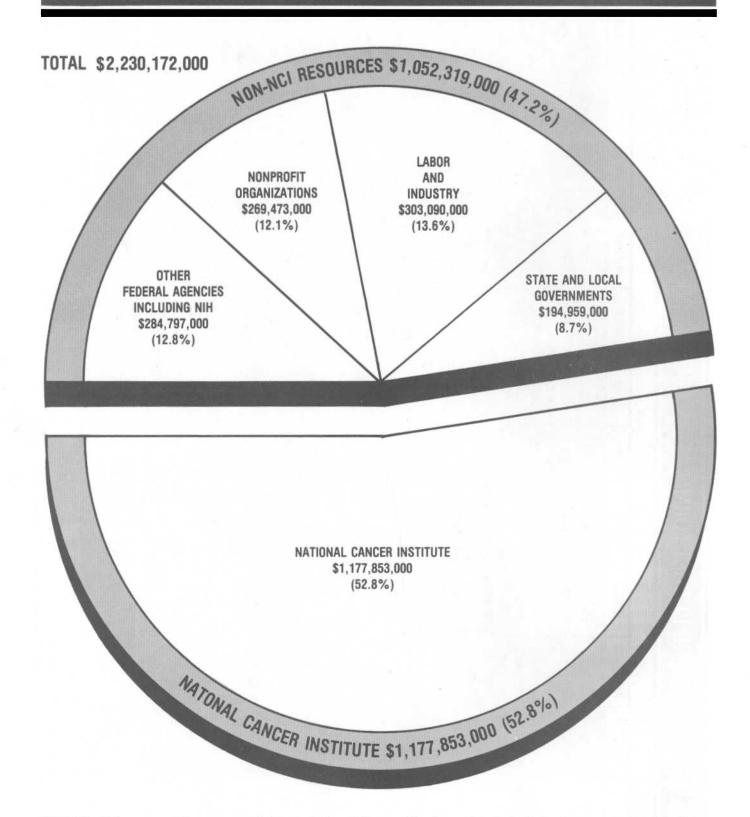
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBE
NCI STAFF ¹			for two yes both the B is submitte President, submitted Administra	tion's guide onal testimor	ture for jet, which i the liget	NCI Director's Meeting—establish specific division levels for upcoming fiscal year		Formulation of By- Pass Budget Formulation of budget within Administration guidelines		Formulation of President's Budget		
NCAB ²					Review and revise Preliminary Budget for two fiscal years in future				Review By Budget Su Directly to	bmitted	Division presentations of program activifor fiscal year just completed	
BSC ³	Review ope for current and policie Director's	s from NCI				Review and on impleme divisional p	ntation of		Annual Dir Budget Re current ar upcoming	view		

¹Executive Committee and key administrative staff

²National Cancer Advisory Board — presidential appointees

³Board of Scientific Counselors—outside NCI peer review bodies for each of four operating divisions

ESTIMATED TOTAL NATIONAL RESOURCES FOR CANCER RESEARCH AND CANCER PREVENTION AND CONTROL – FISCAL YEAR 1985

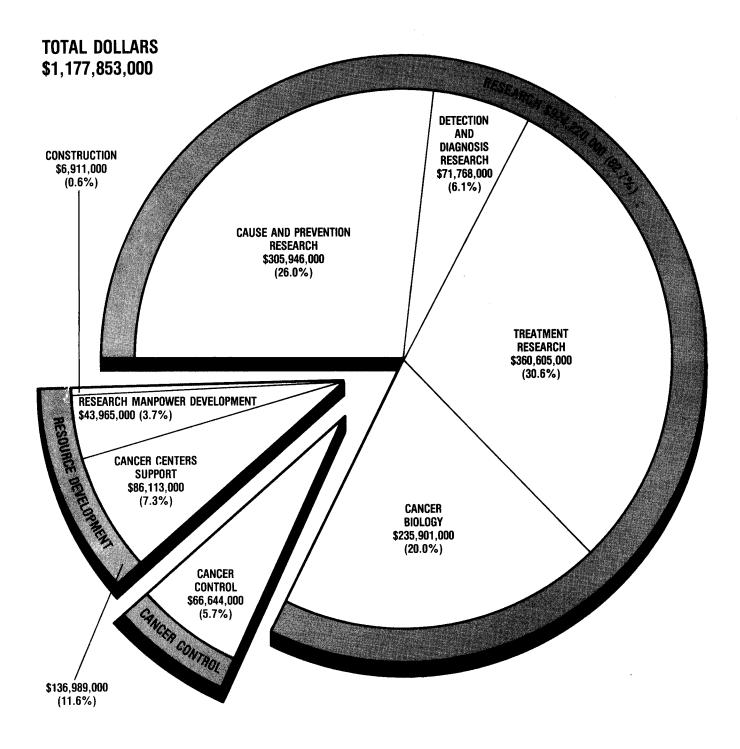


NOTE: Non-NCI resources data were provided by the Office of Program Planning and Analysis, NCI and represents 1984 data, the most recent available at publication.

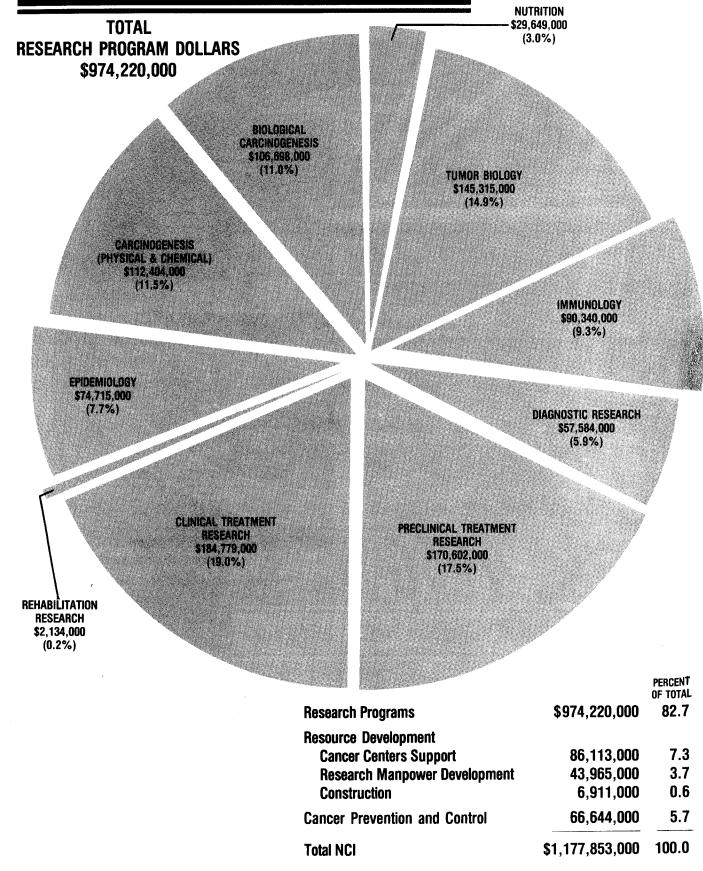
NCI BUDGET – FISCAL YEAR 1985

1985 Appropriations
Less: — Mandated Lapse-Public Law 98-473 — 1,857,000
— Directed Carryover of funds
into FY 1986 — 3,714,000
— Lapse — 382,000
1985 Actual Obligations 1,177,583,000

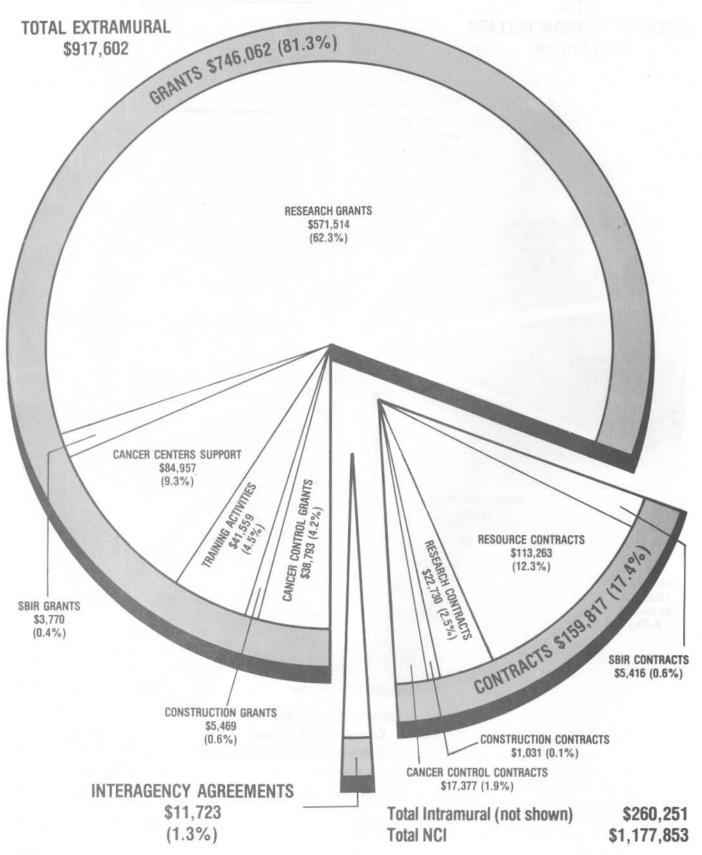
NCI PROGRAM STRUCTURE – FISCAL YEAR 1985



NCI RESEARCH PROGRAMS – FISCAL YEAR 1985



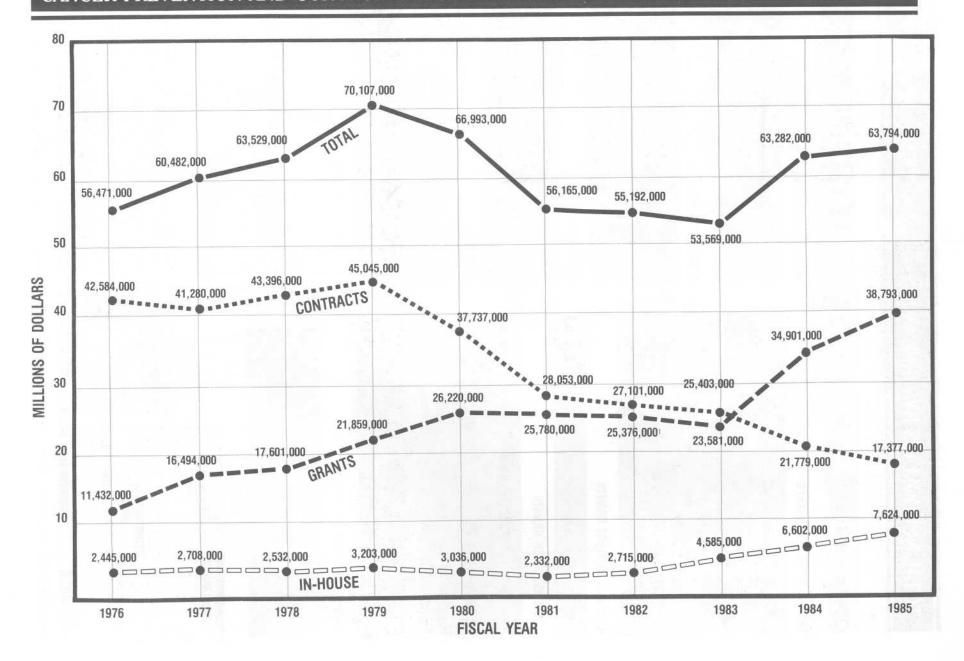
NCI EXTRAMURAL FUNDS – FISCAL YEAR 1985

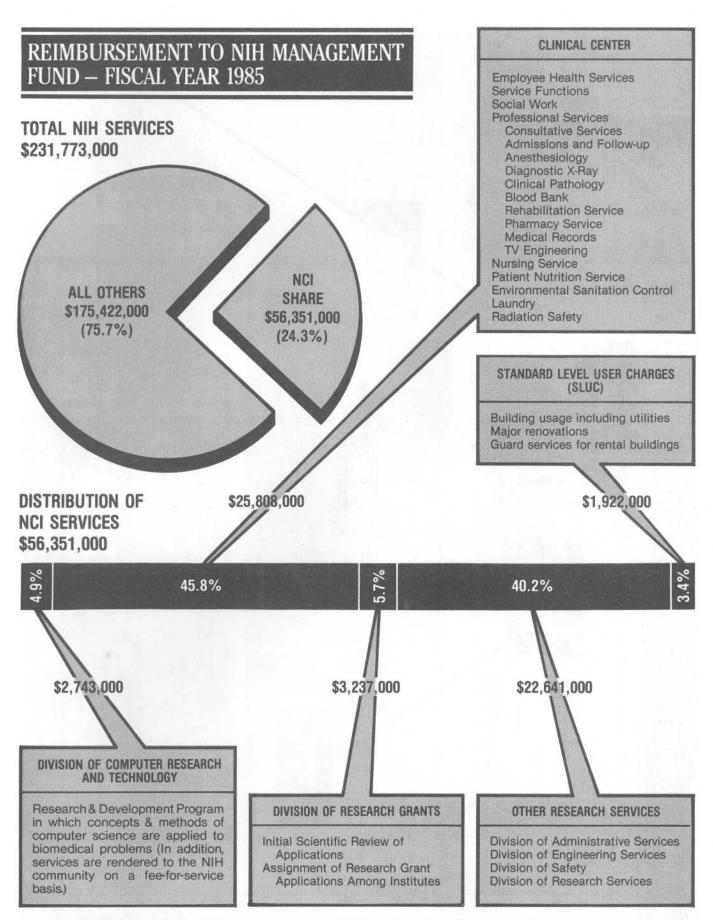


TOTAL NCI DOLLARS BY MECHANISMS – FISCAL YEAR 1985

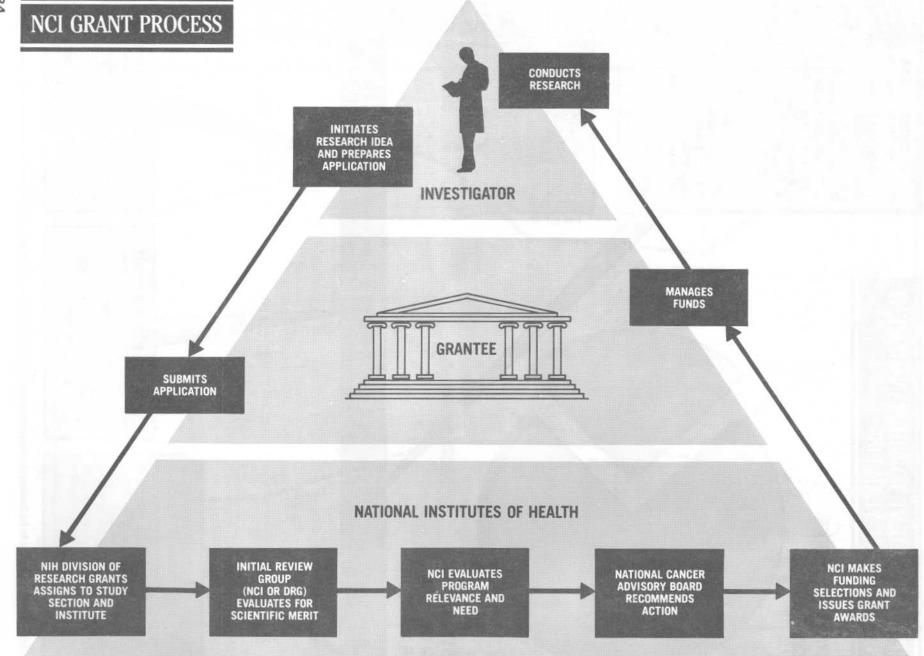
AMOUNT	MECHANISM	PERCENT OF TOTAL	AMOUNT	MECHANISM	PERCENT OF TOTAL
RESEARCH I	PROJECT GRANTS		RESEARCH /	AND DEVELOPMENT CONTRACTS	
6,581 13,060 135,984	Program Projects	28.8 0.6 1.1 11.5 0.9		Research and Resource Contracts SBIR Contracts Total	12.5 0.5 13.0
3,770	Coop Agreements SBIR Grants Outstanding Investigator	0.9 0.3 0.7	CANCER CO	NTROL	ESSENCE OF THE PARTY OF THE PAR
	Outstanding Investigator Minority Supplements Total	0.0	17,377	Cancer Control Grants Cancer Control Contracts Cancer Control Inhouse	3.3 1.5 0.6
RESEARCH	CENTERS GRANTS	all temperaturestica	63,794	Total	5.4
84,957	Center Core Grants	7.2	CONSTRUCT	TION	
OTHER RESI	EARCH GRANTS		5,469 1,031		0.5 0.1
STATE OF THE PERSON NAMED IN COLUMN 2 IN C	Scientific Evaluation Conference Grants	0.2	6,500	Total	0.6
6,799	Research Career Programs Clinical Education Programs	0.6	INHOUSE		
50,822 935	Clinical Cooperative Groups National Organ Systems Program	4.3 0.1 0.3	193,978 58,649	Intramural Research Research Management and Support	16.4 5.0
	Comp. Min. Bio. Supp. Prog. Surgical Oncology	0.0	252,627	Total	21.4
69,571	Total	5.9			
TRAINING P	ROGRAM				
	NRSA Individual NRSA Institutional	0.4 2.2	TOTAL		
30,797	Total	2.6	\$1,177,853	TOTAL NCI	100.0%

CANCER PREVENTION AND CONTROL OBLIGATIONS BY MECHANISM - FISCAL YEARS 1976-1985





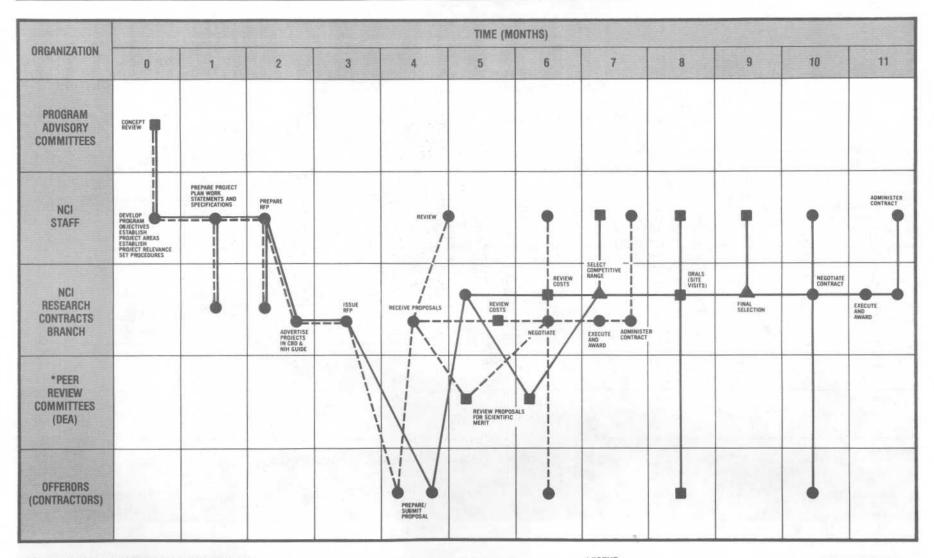
The Management Fund provides for the financing of certain common supporting research services and administrative activities which are required in the operations of NIH.



NCI REQUEST FOR APPLICATION (RFA): THE PROCESS

MAJOR EVENT	TIME ELAPSED (MONTHS)	DIVISION	OFFICE OF THE DIRECTOR, NCI/ DIVISION OF EXTRAMURAL ACTIVITIES	BOARD OF SCIENTIFIC COUNSELORS	NATIONAL CANCER ADVISORY BOARD	DIVISION OF RESEARCH GRANTS (DRG)/ OFFICE OF EXTRAMURAL RESEARCH AND TRAINING (DERT)	APPLICANT
D RELEASE	2	Presentation of Idea	Proper Funding Mechanism Sought Approval of Concept by Executive Committee	- Concept Review			
PREPARATION AND RELEASE	3	Develop RFA	Review/Clearance of RFA Proposal			Clearance by DRG, NIH — Acceptance by OERT, NIH	
	5					Publication Scheduled by OERT, NIH Published in NIH Guide To Grants and Contracts Receipt of Applications — by DRG	Prepare Application —Letter of Intent may be Required
80	13		Initial Review — DEA, NCI				
REVIEW AND AWARD	14						
	15				Review —		
	16		Funding Decisions				
	17						- * Award -

NCI CONTRACT AWARD PROCESS – UNDER CANCER ACT OF 1971



NOTE: SIMULTANEOUS ACTIVITIES BY MORE THAN ONE ORGANIZATION INDICATE COOPERATIVE EFFORTS LEGEND:

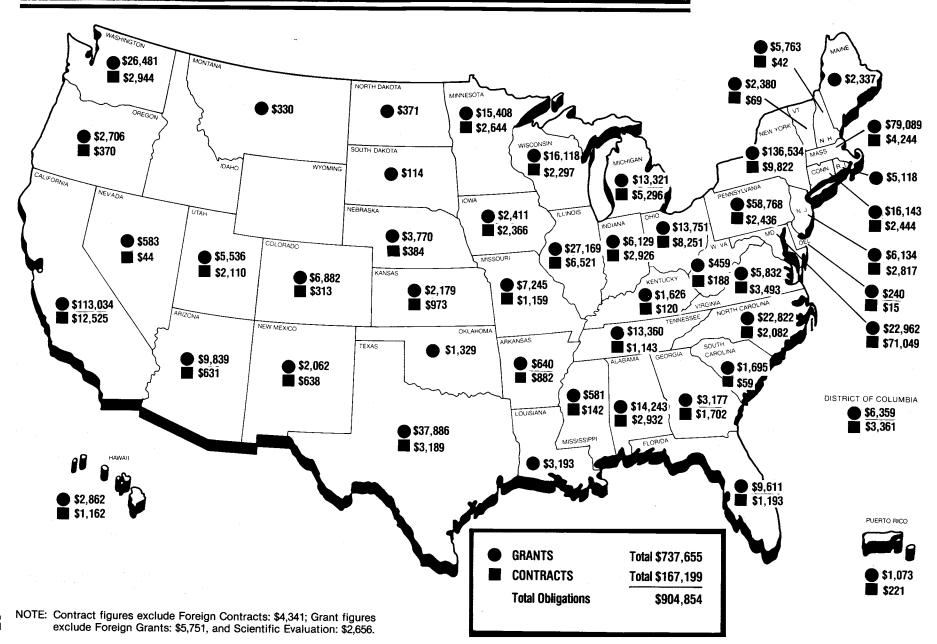
OPERATION
REVIEW

▲ DECISION

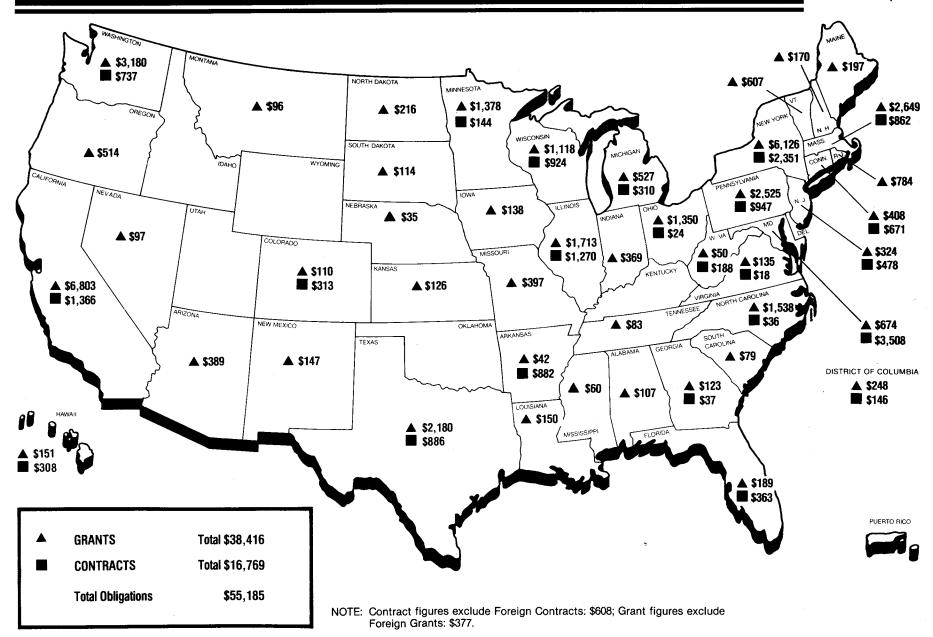
NORMAL COMPETITIVE FLOW
 NON-COMPETITIVE CONTRACTS

 AD HOC COMMITTEES MAY BE USED— INCLUDES NON-GOVERMENT EMPLOYEES

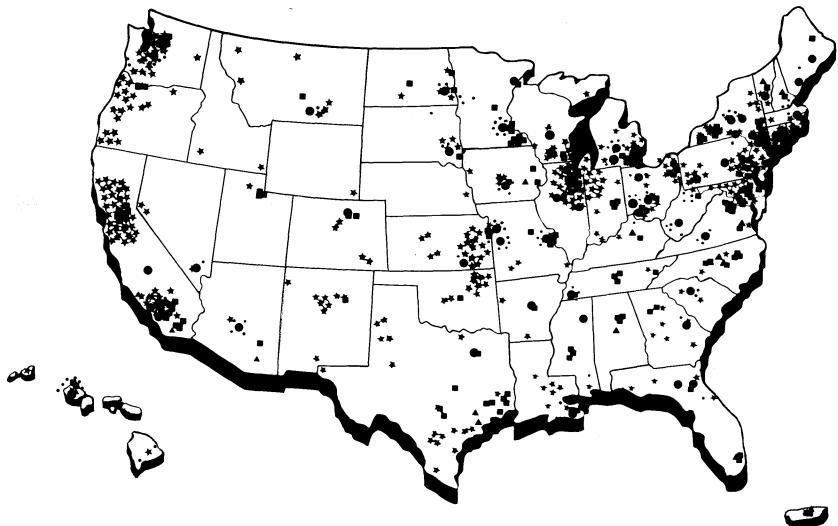
STATE DISTRIBUTION OF GRANTS AND CONTRACTS – FISCAL YEAR 1985



DISTRIBUTION OF CANCER CONTROL GRANTS AND CONTRACTS – FISCAL YEAR 1985



NATIONAL CANCER NETWORK



- ■ Community Clinical Oncology Program (CCOP) and Hospital Components
- ▲ Cancer Centers
 Clinical Cooperative Group Members
- * Cooperative Group Outreach Program (CGOP) Components

INSTITUTIONS RECEIVING MORE THAN \$3,000,000 FROM THE NCI — FISCAL YEAR 1985

NAME OF INSTITUTION	GRANTS	CONTRACTS	CONSTRUCTION	TOTAL	STATE
NAME OF INSTITUTION	UNANIS	CONTINUE			2. D
University of Alabama System	9,383	203	0	9,586 6,448	ALABAMA ALABAMA
Southern Research Institute	3,904	2,544	-0	0,440	ALADAMA
University of Arizona	7,464	631	1,524	9,619	ARIZONA
	54.450	2.260	0	56,421	CALIFORNIA
University of California	54,152 14,944	2,269 1,193	0	16,137	CALIFORNIA
University of Southern California Stanford University	13,566	161	ō	13,727	CALIFORNIA
Litton Industries	0	11,819	0	11,819	CALIFORNIA
Scripps Clinic and Research Foundation	5,729	587	0	6,316	CALIFORNIA
Northern California Cancer Program, Inc	3,026	2,345	0	5,371	CALIFORNIA
Salk Institute for Biological Studies	5,219	0	0	5,219	CALIFORNIA CALIFORNIA
La Jolla Cancer Research Foundation	3,498	0	307	3,805	CALIFORNIA
Whittaker Corporation	1 000	3,550	0	3,550 3,012	CALIFORNIA
SRI International	1,838	1,174	est Con	5,012	
University of Colorado System	3,160	0	0 =	3,160	COLORADO
Yale University	14,446	1,059	0	15,505	CONNECTICUT
			99.	4 700	FLORIDA
University of Miami	4,296	437 215	0	4,733 4,644	FLORIDA
State University System of Florida	4,429	215	0	4,044	Libra I
Emory University	2,313	1,034	0	3,347	GEORGIA
	0.077	950	0	3,227	HAWAII
University of Hawaii System	2,277	950			A STATE BUILDING
University of Chicago	10,356	89	0	10,445	ILLINOIS
University of Illinois	3,976	516	0	4,492	ILLINOIS
IIT Research Institute	636	3,580	0	4,216	ILLINOIS ILLINOIS
Northwestern University	2,822	1,059	0	3,881	ILLINOIS
Indiana University	3,042	0	0	3,042	INDIANA
University of lowa	2,202	2,366	0	4,568	IOWA
	0	24,948	0	24,948	MARYLAND
Program Resources, Inc	18,409	650	ő	19.059	MARYLAND
Johns Hopkins University	34	6,576	Ö	6,610	MARYLAND
Westat, Inc	190	5,601	0	5,791	MARYLAND
Security and the second security of the second seco	00 007	201	- 10 o	20,478	MASSACHUSETTS
Dana-Farber Cancer Institute	20,087 12,025	391 503	Ö	12,528	MASSACHUSETTS
Harvard University	10.359	140	ō	10,499	MASSACHUSETTS
Massachusetts Institute of Technology	7,060	129	Ō	7,189	MASSACHUSETTS
Brigham and Women's Hospital	4,077	14	- 0	4,091	MASSACHUSETTS
Boston University	3,861	0	0	3,861	MASSACHUSETTS
Tufts University	3,629	0	0	3,629	MASSACHUSETTS
University of Massachusetts	3,353	0	0	3,353	MASSACHUSETTS
Michigan Cancer Foundation	2,934	2,988	0	5,922	MICHIGAN
University of Michigan	5,441	191	0	5,632	MICHIGAN
CONTRACTOR SECTION OF	8,051	957	0	9,008	MINNESOTA
University of Minnesota	7,018	1,587	ŏ	8,605	MINNESOTA
A STATE OF THE PARTY OF THE PAR			T ,	4.000	MICCOLIDI
Washington University	4,383	0	0	4,383	MISSOURI
University of Nebraska System	3,641	384	0	4,025	NEBRASKA
Dartmouth College	5,591	0	0	5,591	NEW HAMPSHIRE
Memorial Sloan-Kettering Cancer Center	31,687	2,182	0	33,869	NEW YORK
Methorial Stoat Prettering Cartoe Center					

NAME OF INSTITUTION	GRANTS	CONTRACTS	CONSTRUCTION	TOTAL	STATE
New York State Dept of Health	16,080	1,629	0	17,709	NEW YORK
Columbia University	13,075	0	0	13,075	NEW YORK
University of Rochester	10,340	0	900	11,240	NEW YORK
Yeshiva University	9,988	0	238	10,226	NEW YORK
New York University	9,469	0	0	9,469	NEW YORK
American Health Foundation	6,856	511	0	7,367	NEW YORK
Cold Spring Harbor Laboratory	6,610	0	0	6,610	NEW YORK
State University of New York	5,565	191	0	5,756	NEW YORK
Rockefeller University	4,810	0	0	4,810	NEW YORK
Cornell University	4,224	543	0	4,767	NEW YORK
City University of New York	4,481	0	0	4,481	NEW YORK
Duke University	11,731	284	0	12,015	NORTH CAROLINA
University of North Carolina System	7,806	0	0	7,806	NORTH CAROLINA
Ohio State University	4,383	313	0	4,696	ОНЮ
Battelle Memorial Institute	359	3,362	0	3,721	OHIO
Case Western Reserve University	3,628	0	0	3,628	OHIO
Cleveland Clinic Foundation	1,466	1,720	0	3,186	OHIO
University of Pennsylvania	9.024	294	2.500	11,818	PENNSYLVANIA
Institute for Cancer Research	9.624	179	0	9,803	PENNSYLVANIA
Wistar Institute of Anatomy and Biology	9,351	0	0	9,351	PENNSYLVANIA
University of Pittsburgh	6,227	560	0	6,787	PENNSYLVANIA
Pennsylvania State University	6,588	0	0	6,588	PENNSYLVANIA
Temple University	3,604	0	0	3,604	PENNSYLVANIA
Hahnemann University	3,086	0	0	3,086	PENNSYLVANIA
St. Jude Children's Research Hospital	7,437	0	0	7,437	TENNESSEE
University of Texas System	28,404	2,837	0	31,241	TEXAS
Baylor College of Medicine	5,534	20	0	5,554	TEXAS
Utah State Higher Education System	5,284	1,868	0	7,152	UTAH
Fred Hutchinson Cancer Research Center	16.662	1,424	0	18.086	WASHINGTON
University of Washington	6,600	1,278	0	7,878	WASHINGTON
University of Wisconsin System	14,829	1,861	0	16,690	WISCONSIN

TOTAL	\$581,633	\$103,896	\$5,469	\$690,998	
PERCENT OF TOTAL	84.2	15.0	0.8	100.0	
TOTAL NCI FISCAL YEAR 1985 OBLIGATIONS	\$1,177,853				
PERCENT OF TOTAL NCI OBLIGATIONS	49.4	8.8	0.5	58.7	

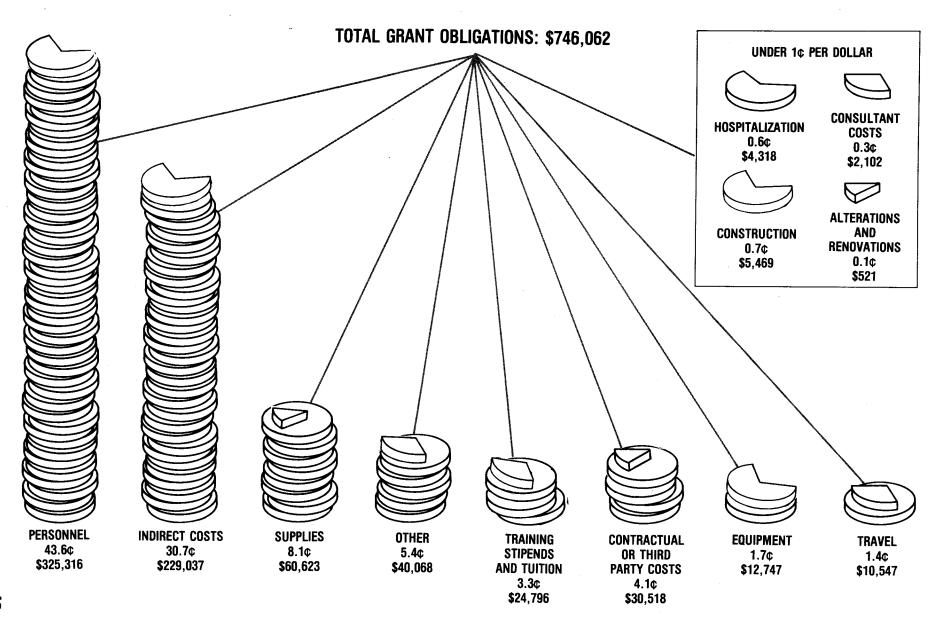
DISTRIBUTION OF NCI CONTRACTS – FISCAL YEAR 1985

PERCENT OF TOTAL NUMBER OF CONTRACTS	NUMBER OF CONTRACTS	NCI PROGRAM AREA	THOUSANDS OF DOLLARS	PERCENT OF TOTAL DOLLARS
2.6	16	Division of Cancer Biology and Diagnosis	\$4,178	2.4
51.5	319	Division of Cancer Treatment	60,970	35.8
25.4	157	Division of Cancer Etiology	37,461	22.0
19.4	120	Division of Cancer Prevention and Control	33,695	19.8
1.1	7	Office of the Director	34,205	20.0
	619	TOTALS	\$170,509	

PERCENT OF DTAL NUMBER OF CONTRACTS	NUMBER OF CONTRACTS	TYPE OF INSTITUTION	THOUSANDS OF DOLLARS	PERCENT OF TOTAL DOLLARS
43.1	267	Profit-Making	\$81,693	47.9
	136	Academic	30,672	
22.0	128	Non-Profit	35,506	18.0
20.7	48	Federal Government	14,494	20.8
7.8	15	State and Local Government	3,953	8.5
4.0	25	Foreign	4,191	2.5
	619	TOTALS	\$170,509	

NOTE: Excludes contracts that are not in direct support of research or control, such as Cancer Communications, Program Planning, and Construction contracts.

DISTRIBUTION OF THE GRANT DOLLAR – FISCAL YEAR 1985



MINORITY-FOCUSED PROGRAMS

Comprehensive Minority Biomedical Program (CMBP):

- Promotes broadened participation by minorities in cancer-related research training.
- Contributes to the support of NCI and clinical cooperative research groups to better enable NCI's research to reach and support minority populations that are particularly susceptible to cancer.
- 3. Provides additional support to NCI-funded investigators who wish to engage minority investigators in their research.
- 4. Encourages participation in annual meetings of the American Association for Cancer Research by providing travel support for minority scientists who are engaged in cancer research or who have training that could lead to contributions in this field.

Cancer Control Intervention Research Activities:

Due to major differentials which exist in cancer incidence, mortality and survival between minority populations and non-minority populations, an intervention research program has been established. Current program initiatives include:

- Smoking prevention and cessation programs to identify and correct the causes of avoidable deaths from cancer in Black populations.
- Establishment of a Research Network for Black Populations has been formed to address important scientific and social issues relevant to this population.
- 3. Data collection efforts on cancer in Hispanics has been increased.
- 4. Development of a Hispanic community liaison function is being addressed in order to reach this population.

APPROPRIATIONS OF THE NCI 1938-1986

1938 THROUGH 1966 \$1,331,538,220

1967 1968 1969 1970 1971	185,149,500 190,486,063	14.9% \$2,296,568,783
1973 1974		3,794,000 92,205,000 551,191,500 691,666,000 ¹

85.1% \$13,140,161,500

	\ 3/3/3/1000
'3	492,205,000
74	551,191,500
975	691,666,000 ¹
1976	
"TQ"	152,901,000 ²
1977	815,000,000
1978	872,388,000 ³
1979	937,129,000
1980	1,000,000,000 ⁴
1981	989,355,000 ⁵
1982	986,617,000 ⁶
1984	1,081,581,000 ⁸
1985	
198	6

TOTAL (1938-1986).....

.....\$15,436,730,283

TRANSITION QUARTER ("TQ")—July 1, 1976 through September 30, 1976-The Interim Period in the changing of the Federal Fiscal Year from July 1 through June 30, to October 1 through September 30.

¹Includes \$18,163,000 for training funds provided by Continuing Resolution.

²Includes \$3,201,000 for training funds provided by Continuing Resolution

 $^3\mbox{lncludes}$ \$20,129,000 for training funds provided by Continuing Resolution.

 $^4 1980$ appropriation authorized under a Continuing Resolution.

⁵Reflects 1981 rescission of \$11,975,000.

⁶Amount included in Continuing Resolution. Includes \$47,988,000 transferred to the National Institute of Environmental Health Sciences for the National Toxicology Program.

⁷Appropriated under Continuing Resolution and Supplemental

Appropriation Bill.

⁸Includes \$23,861,000 for training funds provided by a Continuing Resolution and \$4,278,000 in a Supplemental Appropriation Bill.

NCI BUDGET HISTORY BY MECHANISM: SELECTED FISCAL YEARS: 1972, 1980, 1985

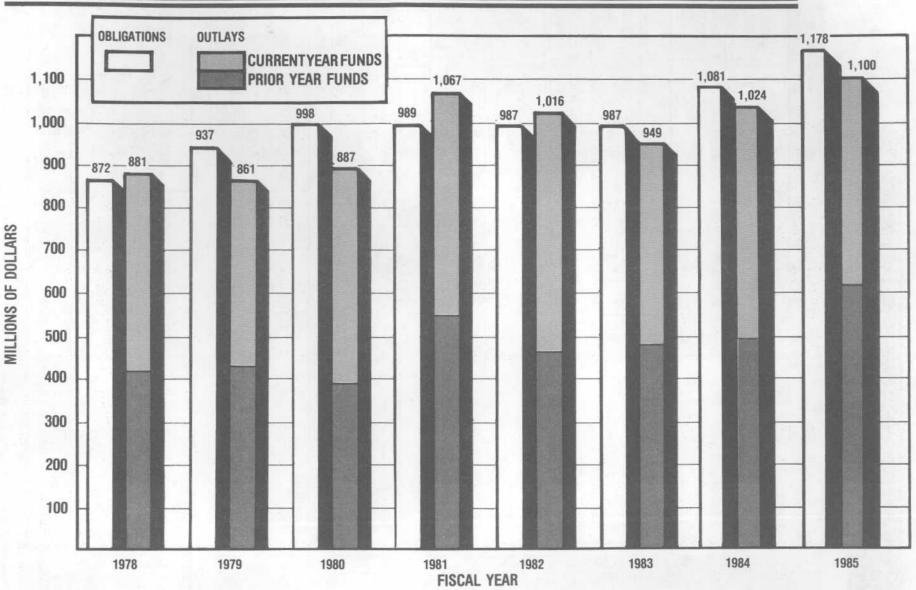
	1972	Actual	1980	Actual	1985	Actual
	Amount	% of Total	Amount	% of Total	Amount	% of Tot
Group 1—Investigator Initiated:				101-11		
Regular Research Grants	60,073	19.0	216,081	30.9	352,426	40.9
Clinical Cooperative Groups	10,102	3.2	36,884	5.3	50,822	5.9
Program Projects PO1's	39,260	12.4	104,643	14.9	135,984	15.8
Clinical Education Program	-	1.2.7	10,906	1.6	3,963	0.5
Research Career Program	2,026	.6	5,014	0.7	6,799	0.8
Fellowships and Training	18,395	5.8	27,260	3.9	30,797	3.6
Organ Site	638	.2	17,554	2.5	30,737	0.0
Cancer Centers-Core Support	10,090	3.2	67,421	1,000,000	84,957	9.9
	111111111111111111111111111111111111111			9.6	04,937	9.9
Other Center Support Grants	1,089	.3	591	0.1	10.000	4.0
Cooperative Agreements			4 000		10,296	1.2
Comp. Minority Biomedical Support			1,980	0.3	3,373	0.4
Organ System					935	0.1
Outstanding Invest Grant					7,896	8.0
Subtotal	141,673	44.7	488,334	69.8	688,248	79.9
(Small Business Grants)					(3,770)	(0.4)
Group II-Co-Initiated:		The Street				
RFAs			6,683	1.0	13,060	1.5
Research Contracts	46,802	14.8	55,265	7.8	28,146	3.3
RFA-R21s					492	0.0
Subtotal	46,802	14.8	61,948	8.8	41,698	4.8
(Small Business Contracts)					(5,416)	(0.6)
	-	LOT .	1 23		(-, -, -,	(/
Group III-NCI/NCP Initiated:						
Resource Support Contracts	63,194	20.0	115,425	16.5	113,263	13.1
Interagency Agreements	12,053	3.8	18,740	2.7	11,723	1.4
Subtotal	75,247	23.8	134,165	19.2	124,986	14.5
Group IV-Other Resources:		The second				
Planning Grants	1,698	.5	221	0.0		
Construction Grants		14.9	10,814	1.5	5,432	0.6
	47,004	1.3	4,618	0.7	1,068	0.0
Construction Contracts	3,999					
Subtotal	52,701	16.7	15,653	2.2	6,500	0.8
Total	316,423	100.0	700,100	100.0	861,432	100.0
% Total		84.3		73.1		73.1
In-House Research	25,696	6.8	98,665	10.3	128,631	10.9
Management & Support	33,246	8.9	95,735	10.0	131,620	11.2
(NIH Management Fund)	(12,910)	(3.4)	(39,549)	(4.1)	(56,351)	(4.8)
Cancer Control (Grants & Contracts)	(12,010)	(3.4)	63,663	6.6	56,170	4.8
Subtotal	58,942	15.7	258,063	26.9	316,421	26.9
TOTAL NCI	375,365	100.0	958,163	100.0	1,177,853	100.0
Transfers:						Ī
Diagnostic Radiation	(2,800)	(.8)	(3,611)	0.4		
National Toxicology Program	(2,500)	()	(43,495)	3		

COMPARISON OF DOLLARS, POSITIONS AND SPACE

		DOLLARS			POSITIONS		SPACE				
	OBLIGATIONS (\$000's)	PERCENT OF INCREASE OVER BASE YEAR	PERCENT OF INCREASE OVER PRIOR YEAR	ACTUAL FULL-TIME PERMANENT EMPLOYEES	PERCENT OF INCREASE OVER BASE YEAR	PERCENT OF INCREASE OVER PRIOR YEAR	ALLOCATED SPACE (SQUARE FEET)*	PERCENT OF INCREASE OVER BASE YEAR	PERCENT OF INCREASE OVER PRIOR YEAR		
1	232,855	Base Year	- Tia 13010	1426	Base Year	<u>-</u>	321,230	Base Year	-		
	378,636	62.6	62.6	1665	16.8	16.8	329,587	2.6	2.6		
	431,245	85.2	13.9	1736	21.7	4.3	357,972	11.4	8.6		
	581,149	149.6	34.8	1805	26.6	4.0	381,436	18.7	6.6		
	699,320	200.3	20.3	1849	29.7	2.4	382,485	19.1	0.2		
	760,751	226.7	8.8	1955	37.1	5.7	387,324	20.6	1.3		
	814,957	250.0	7.1	1986	39.3	1.6	428,285	33.3	10.6		
	872,369	275.0	7.2	1969	38.1	- 0.9	491,725	53.1	14.8		
	936,969	302.3	7.4	1973	38.4	0.2	493,156	53.5	0.3		
	998,047	328.6	6.5	1837	28.8	-6.7	467,730	45.6	-5.2		
	989,338	324.9	- 0.9	1815	27.3	- 1.2	472,633	47.1	1.0		
	986,564	323.7	- 0.3	1703	19.4	-6.2	477,782	48.7	1.1		
	986,811	323.8	0.02	1731	21.4	1.6	484,093	50.7	1.3		
	1,081,460	364.4	9.6	1698	19.1	- 1.9	466,890	45.3	- 3.6		
	1,177,853	405.8	8.9	1596	11.9	-6.1	466,890	45.3	.0		

^{*}Does not include the Frederick Cancer Research Facility.

NATIONAL CANCER INSTITUTE OBLIGATIONS AND OUTLAYS, FISCAL YEARS 1978-1985



OBLIGATIONS: Orders placed, grants and contracts awarded, salaries earned and similar financial transactions which legally utilize or reserve an appropriation for expenditure. **OUTLAYS**: Payments (cash or checks) made from current or prior year appropriations.

Brobb of B		REQUE	STED	RECOM	MENDED	AWA	RDED	PERCENT
	TYPE AWARDED	NUMBER	AMOUNT	NUMBER	AMOUNT	NUMBER	AMOUNT	FUNDED'
	Competing							
	New	1,913	\$219,207	1,403	\$117,167	461	\$45,303	32.9%
	Renewal	593	115,053	550	73,680	293	45,802	53.3
1980	Board Supplement	43	2,619	38	1,492	29	1,261	76.3
	Subtotal	2,549	\$336,879	1,991	\$192,339	783	\$92,366	39.3
	Noncompeting					1,762	228,959	
	Total					2,545	\$321,325	
	Competing					- 17 17		
	New	2,017	\$277,145	1,594	\$156,704	483	\$53,004	30.3
	Renewal	687	131,355	653	91,034	311	48,122	47.6
1981	Board Supplement	61	3,776	1000000	1,738	32	940	68.1
100	Subtotal	2,765	\$412,276	2,294	\$249,476	826	\$102,066	36.0
	Noncompeting				Control - Programme Control	1,802	253,389	00.0
	Total					2,628	\$355,455	-
	Competing ³							
	New	2,187	\$308,153	1,784	\$189,245	434	\$47,224	24.3
	Renewal	730	174,573	706	117,099	323	50,186	45.7
1982	Board Supplement	28	2,266	1000000	1,289	4	86	16.7
1302	Subtotal	2,945	\$484,992	2,514	\$307,633	761	\$97,496	30.3
	Noncompeting					1,797	260,853	50.5
	Total					2,558	\$358,349	~
		T				2,000	9000,043	
	Competing ³	0.000	4000 570	4044	0045.045	500	055.040	00.7
	New	2,229	\$323,572	1,844	\$215,945	529	\$55,316	28.7
	Renewal	783	160,881	763	113,664	358	56,698	46.9
1983	Board Supplement	23	2,492	15	727	3	110	20.0
	Subtotal	3,035	\$486,945	2,622	\$330,336	890	\$112,124	33.9
	Noncompeting					1,923	294,019	
	Total					2,813	\$406,143	
	Competing	2007 00 17700						
	New	2,113	\$310,433	1,773	\$207,996	558	\$68,376	31.5
	Renewal	774	179,764	745	135,253	416	90,140	55.8
1984	Board Supplement	13	1,766	11	788	3	105	22.3
	Subtotal	2,900	\$491,963	2,529	\$344,037	977	\$158,621	38.6
	Noncompeting					1,869	302,626	
	Total					2,846	\$461,247	
	Competing							14.8
	New	2,400	\$398,621	2,042	\$282,590	599	\$83,691	29.3
	Renewal	782	183,483	758	140,472	416	84,708	54.9
1985	Board Supplement	19	1,659	13	850	2	65	15.4
	Subtotal	3,201	\$583,763	2,813	\$423,912	1,017	\$168,464	36.2
	Noncompeting					1,964	348,011	
						2,981	\$516,475	-

Note: Includes RO1 traditional grants, PO1 program projects, R23 new investigator research awards, R35 Outstanding Investigator Grants, RO1 and UO1 awards of RFA's, and R43/R44 Small Business Innovative Research awards.

^{&#}x27;Percent Funded; Number Awarded + Number Recommended.

²Because of fiscal restraints, grants were awarded below recommended levels.

